

Houston South Vegetation Management and Restoration Project: Response to Scoping Comments

Comment No.	Name/Date Received	Summary	Forest Response
1	Myke Luurtsema 11-21-18	Please add me to the contact list for this project. I see it is posted on the HNF website, but there are no details. When is the scoping letter going to be posted? I assume, since the FS has been talking about this project privately and publicly for some time, that there are some preliminary maps available. Will you please send them along at your earliest convenience?	The scoping letter and map was sent/posted on 11-26-18
2-1	Sherry Mitchell-Bruker 11-28-18	Please include Friends of Lake Monroe in any public correspondence related to Houston South project.	Included to project correspondence list
2-2	Sherry Mitchell-Bruker 11-29-18	Could you please provide us with the Tell City Barrens Decision Document and Environmental Assessment? This project was mentioned in the Houston South scoping letter with no link to the actual documentation.	Provided link
2-3	Sherry Mitchell-Bruker 11-30-18	Could you email a copy of this report, cited in the ea?	Provided RFSS <i>Biological Evaluation of Effects to Plant and Terrestrial Invertebrate Regional Forester Sensitive Species for the Tell City Barrens Restoration Project</i>
2-4	Sherry Mitchell-Bruker 12-3-18	Request for an extension of the scoping comment period	Email message from the District Ranger explaining the decision to not extend the scoping period (PR b12.2_Mitchell-Bruker)
2-5	Sherry Mitchell-Bruker 12-5-18	Can you tell me what level of employees, in the past, have applied herbicides and if what protections they were using? Also, I would like to know what methods of herbicide have actually been employed on HNF in the past few years.	<p>Past NNIS herbicide treatments include cut stump treatments, basal bark and foliar treatments using a backpack sprayer and foliar spraying with a UTV.</p> <p>All employees or contractors that apply herbicides are either licensed by the Office of Indiana State Chemist or under the direct supervision of someone who is. The Forest uses only EPA approved non-restricted herbicides and follows all EPA and label directions. Silvicultural herbicide applications would have the same requirements.</p>

2-6	Sherry Mitchell-Bruker 12-11-18	Can you provide us information on which Houston South treatments are designed to create early successional forest?	Even-aged management, which consists of clearcut and shelterwood.
2-6.2	Sherry Mitchell-Bruker 12-11-18	So then what is the purpose and need and management plan objective for hardwood thinning, selection, midstory removal, crop tree release and prescribed fire?	Pages 3 and 4 of the scoping letter define the purpose and need and the Draft Proposed Action on pages 5 and 6 describes how these treatments would help to accomplish project goals. The scoping letter can be found at: https://www.fs.usda.gov/project/?project=55119 .
2-6.3	Sherry Mitchell-Bruker 12-11-18	I have read the scoping letter and that is why I am asking. It isn't clear to me. My guess is that the answer to my question is retaining oak hickory forest for many species. Is that correct?	Yes, oak and hickory regeneration and for overall forest health. Page 4 of the scoping letter states, "Stand density is very high in portions of the project area and mortality is occurring. The proposal would reduce the density of the trees, improving forest health." Also on page 4, "As maturing oaks and hickories age and die, they are being replaced by trees such as maple and beech. The oak and hickory provide hard mast-acorns and nuts-that are critical food for many wildlife species. Oak-hickory ecosystems need management activities to regenerate due to severe competition by less desirable species."
2-7	Sherry Mitchell-Bruker 12-13-18	Could you provide an estimate of the amount of fuel created through timber harvest on the proposed houston south project?	Detailed fuels analysis is included in the project record. After harvest, total fuel loading, excluding litter, is anticipated to increase approximately 4.3 times on 1% of the area, 2.2 times on 3% of the area, and 2.1 times on 21% of the of the area while no appreciable change is expected on the remaining 75%. These changes are ephemeral in nature and spread out over the like of the project.
2-8	Sherry Mitchell-Bruker 12-14-18	I have been sent a copy of your response to Monroe County Council. Your indication that you will review comments received after the scoping deadline leaves a question. Will the comments received after the deadline be included in the official NEPA documentation? I would like to point out a model of public outreach that exemplifies proper outreach for a project of this scale. I believe you worked on this forest in the past.	Your comments will be most useful to our process if you submit them on time. The ID team and Responsible Official will look at and consider every comment we receive, even after the deadline.

		https://www.fs.usda.gov/project/?project=52276 What you have provided us during scoping is much more like a pre-scoping document. Please reconsider your determination to go forward with this brief scoping period. I believe you will have a better outcome and the relationships between HNF and local government and citizens would be improved.	
2-8.2	Sherry Mitchell-Bruker 12-14-18	It would be most helpful to all of us if you would answer my question. Will the comments received after the deadline be included in the official NEPA documentation?	Yes, your comments will be included in the NEPA documentation.
2-8.3	Sherry Mitchell-Bruker 12-14-18	Just to be clear: Will comments received after the scoping deadline be included in the official NEPA documentation?	Yes, comments received after the scoping period of December 26th will be included in the NEPA documentation. It would be most helpful to the analysis process, however, for those comments to be sent by that date.
3	Andrew Becher 11-28-18	I hunt and camp in this area quite often. It is beautiful and the pines, although "unnatural" are a great addition to our forest. I'm against the recommendations proposed. Clear cutting in this area is a poor decision by the forest service. This project, if it continues, will give me less reason to continue to enjoy this area of national forest. Please do not continue with this forest mgmt project	Comment noted.
4-1	Ann Deutch 11-28-18	Please add me to your email list for the vegetation management and restoration project. I have no comment at this time. Thank you.	Added to the list
4-2	Ann Deutch 12-4-18	I request an extension of the scoping period to allow us time to make useful and informative comments about the issues that must be considered.	Email message from the District Ranger explaining the decision to not extend the scoping period (PR b14.2 Deutch)
4-3	Ann Deutch 12-25-18	Please craft an alternative that prioritizes both protection of the Lake Monroe watershed and promotion of the recreational opportunities now in existence.	Watershed protection and recreational opportunities are Forest-wide priorities. Maintain and Restore Watershed Health and Provide for Recreation Use in Harmony with Natural Communities are two of the eight goals of the Forest Plan.

			<p>The purpose and need of this project would fulfill Forest Plan direction associated with the goal of maintaining and restoring sustainable ecosystems. Alternatives must meet the purpose and need. "Reasonable alternatives to the proposed action should fulfill the purpose and need and address unresolved conflicts related to the proposed action" (FSH 1909.15 – National Environmental Policy Act Handbook, Ch. 10 p. 31)</p>
4-3.1	Ann Deutch 12-25-18	<p>Local adherence to the Forest Service's multiple use mandate should take into consideration whether or not there is a local need for each various use. In particular, please describe the availability of timber resources from both public and private sources. Please analyze the likelihood that commercial logging operations working in this part of Indiana could meet their needs for a viable livelihood without the proposed logging on the Hoosier.</p>	<p>The project proposal meets 2006 Forest Plan objectives (USDA FS 2006a).</p> <p>Harvesting timber is used as a tool to accomplish the proposed action. A viable livelihood for commercial logging operations is not part of the project purpose and need.</p>
4-3.2	Ann Deutch 12-25-18	<p>Please analyze the long term responsibilities of National Forest management with respect to the increased public awareness and support of assuring opportunities for people to spend time in nature. Local needs for recreation could be much larger than local needs for additional timber resources.</p>	<p>The Forest Plan sets the direction for managing the land and resources of the Hoosier National Forest. The requested analysis can be found in the Chapter 3 of the Forest Plan EIS (USDA FS 2006b). https://www.fs.usda.gov/detail/hoosier/landmanagement/planning/?cid=fsbdev3_017443</p>
4-3.3	Ann Deutch 12-25-18	<p>Consider the competing ways to define forest "health"; quality and growth rate of sapwood is not the only indicator of forest health. Annual net growth is a timber measurement, not a forest measurement. Number of species is not the only indicator of biodiversity. Although the Deam provides a generous area of contiguous older forest, the Plan should acknowledge that studies are lacking regarding non-game and non-charismatic organisms in the forest interior. Scientists are just beginning to describe many closed forest obligates such as invertebrates and microorganisms living in the duff, the soil, and on or inside both woody and herbaceous vegetation. In other words, we have not yet recognized the number of species in an older forest so cannot compare it to young forests on the basis of counting species numbers. As Aldo Leopold said, it is important to save all the parts. In Indiana, the</p>	<p>Few wildlife species thrive in nothing but mature forest. Many species need early successional habitat to provide foraging opportunities of various kinds. The Forest Plan provides guidance to manage the area primarily for plant and animal habitat diversity.</p> <p>The Forest Plan EIS (USDA FS 2006b) page 3-99 shows that under the selected alternative (of the EIS), 81% of the Hoosier will be mature hardwood. This habitat type will still be provided on the Forest.</p>

		contiguous closed canopy older forest “part” should be treasured and preserved.	
4-3.4	Ann Deutch 12-25-18	If young forest is determined to be unavailable to wildlife on private lands maybe the Hoosier needs to define additional 3.3 Management areas. It might be more effective to provide younger forest in a zone instead of aiming for a mosaic of forest types across the 2.8 management area. Please analyze whether a zone of young forest would be more likely to attract Ruffed Grouse than a mosaic across a larger footprint. Please analyze the chances of attracting grouse outside their current range in the face of modeled climate change impacts. Note that the Hoosier appears now to be outside inhabited grouse areas. The extent of their range can be expected to shift even further north due to climate change.	<p>Re-designating management areas would require a Forest Plan Amendment and is beyond the scope of this analysis as we are following current Forest Plan direction to maintain 4-12% young forest habitat in Management Area 2.8.</p> <p>The goal of this project is to provide more suitable habitat to a wide array of wildlife species, including Ruffed Grouse.</p>
4-3.5	Ann Deutch 12-25-18	Please do not extrapolate from the data about Cerulean Warblers’ use of forest openings to imagine that all forest birds need a mosaic of built openings. It seems more likely to me that the limiting factor for populations of a bird such as the Worm-eating Warbler is the availability of nesting areas under a wide area of closed canopy. I am not aware of any research showing whether a mosaic of cut-over areas actually gives these birds a foraging advantage or whether they just tolerate the openings while foraging.	<p>Roberts and King (2017) state, “Many bird species that breed in early-successional vegetation are currently experiencing population declines in eastern North America (Askins 1993, Hunter et al. 2001, Sauer et al.2014). These negative trends are in part attributed to the loss of required disturbance-dependent early-successional vegetation (Litvaitis 1993, Askins 2001, Thompson and Degraaf 2001, King and Schlossberg 2014).”</p> <p>King and Schlossberg (2013) found that “regenerating clearcuts are used extensively by mature-forest birds during the vulnerable postfledging period (Vega Rivera et al., 1998; Marshall et al., 2003; Vitz and Rodewald, 2006; Stoleson, 2013) and in some situations are selected over mature forest (Chandler et al., 2012).</p> <p>Birds on the Regional Foresters sensitive species are included in the draft EA.</p>
4-3.6	Ann Deutch 12-25-18	Please analyze in detail the plausible impacts of a range of modeled as well as observed climate change impacts. For example, I have observed larger numbers of mature trees felled by wind in recent years, especially on saturated soils. We can expect more	Climate change is included in the draft EA.

		heavy rains in the future. It might be inaccurate to plan for any need to create forest openings by chain saw. It will be important to look carefully at cumulative impacts as our climate will continue to change.	
4-3.7	Ann Deutch 12-25-18	Public opinion is mixed regarding whether a wind-fall tree is a valuable forest attribute or wasted timber. Both opinions should be respected and reflected in a range of alternatives.	The value of a wind-fall tree does not dispute any aspect of the Proposed Action, thus does not need to be analyzed.
4-3.8	Ann Deutch 12-25-18	Please make note of the way stiltgrass spreads into closed canopy forest along streams and deer trails as well as anywhere and everywhere the soil is disturbed. Provide analysis about the way stiltgrass, though annual, alters the soil in which it grows to favor its own descendants over the native community of plants. Discuss foreseeable management needs with respect to preserving ephemeral spring wildflowers and tree seedlings. Will these needs differ if management actions that disturb soils are avoided? Include in this discussion examples or analysis of changing herbivory such as the way deer chow down on alternate plants when unpalatable stiltgrass overtakes plants they would have otherwise been able to eat.	Potential spread of non-native invasive plant species is included in the draft EA.
4-3.9	Ann Deutch 12-25-18	Please analyze the rate of spread of invasive plants (both those present and those on their way here) for each alternative and for each species of plant. Provide a cost analysis for treatments to control or contain populations of each invasive plant species. Note the way stiltgrass seems to follow all soil disturbances. Once a population is in place, it must be treated every year. Every. Year. Even when the seed bank has been depleted a single missed plant can reseed a whole area. I have even seen a robust stand of stiltgrass away from all human activity that appeared to originate from a stream bank population and move 30 feet uphill on a near-vertical rocky slope where soil had presumably slumped off after heavy rain. These destructive heavy rains are expected to be more common in the near future.	Potential spread of non-native invasive plant species is included in the draft EA.
4-3.10	Ann Deutch 12-25-18	The USDA publication "The Fire–Oak Literature of Eastern North America: Synthesis and Guidelines"	The epilogue of the referenced publication states: "The role of fire in the upland oak ecosystems of eastern

		<p>clearly shows that dendrochronology and paleoecology evidence for pervasive and frequent fires in the Project Area is non-existent. It is possible that fire was not an historic part of this local forest. (see page 14 describing the wide variability of fire frequency in the area under study.) Please review the evidence showing the landscape conditions that preceded our local Oak populations. Is there any evidence for local fire-cleared landscapes? Review and discuss the original survey notes for the proposed project area regarding both witness trees and the notes about features observed between survey points. Please discuss the potential for Oak saplings to be released in small canopy openings such as those resulting from windfall. In particular, we notice more windfalls in recent years that take down a “domino chain” of trees and create moderate sized holes in the canopy.</p>	<p>North America is complex. Humans have been starting fires for a myriad of reasons throughout eastern North America since the end of the last ice age. Those fires have helped establish and perpetuate oak forests, savannas, shrublands, and woodlands. Presently, fire is ecologically extinct as an important process, and the upland oak ecosystems are in decline because of this absence of fire. Prescribed fire, when applied correctly along with other forest management practices, can reverse this decline and perpetuate upland oak ecosystems into the future.”</p> <p>Using the Physical Chemistry Fire Frequency Model, Guyette et al. (2012) estimates that the mean fire interval (MFI) for the period of 1650-1850 varied from 8-12 years in southern Indiana. This supports earlier work by Frost (1998), who approximated the presettlement fire frequency at 4-12 years.</p> <p>The natural disturbances that you mention occur only in small patches and the understories and mid-stories typically consist of shade tolerant species such as American beech and sugar maple, not oak and hickory.</p>
4-3.11	Ann Deutch 12-25-18	<p>Most logging in Indiana occurs on private forest lands. Please include these cutover areas in your assessment of the availability of early successional forests for wildlife needs. You do not need private or proprietary information for this task; land use data collected by satellites is most likely adequate to evaluate the amount of cut-over acreage in the region.</p>	<p>This analysis was completed as part of the Forest Plan EIS. “Private landowners adjacent to the Forest generally treat their land with a diameter limit harvest. Private landowners generally do not harvest and convert their pine stands to native hardwood, or use prescribed burning to alter the forest floor condition. As a result, private land provides very little early successional habitat and little treatment that could perpetuate the oak-hickory component” (USDA FS 2006b p. 3-179).</p>
5	Juliet Frey 11-30-18	<p>In the plans for this project, is there any intention of conducting a deer kill? I didn't see that in your project details.</p> <p>I ask because in the past few years, at the urging of IU Biology faculty members, a deer kill has been the planned approach for forest management and reduction of non-native species at the Griffy Lake</p>	<p>Conducting a deer kill is not part of the Houston South proposal. This project is a forest health and wildlife habitat improvement project.</p> <p>Additionally, the Indiana Department of Natural Resources establishes hunting regulations to manage deer.</p>

		Nature Preserve. I am among the many Bloomington residents who think this is an unnecessary strategy, and I certainly like much better the description I read of your project in the Herald-Times this morning.	
6	Linda Greene 12-1-18	Nature has managed forests for millions of years, and clearcutting the Hoosier is not a natural form of management. Clearcutting isn't "management" but destruction. I urge you to abandon the plan to clearcut the Hoosier.	Clearcuts would achieve the objectives of converting nonnative pine to native hardwood and to provide habitat for early successional species. The Forest Plan states, "Clearcuts will be used when they are the optimum harvest method to achieve our stated management objectives such as conversion of pine to hardwood or meet wildlife habitat composition objectives" (USDA FS 2006a p. B8).
7-1	Evan McDivitt 12-4-2018	<p>I support your proposal. It is necessary to get better at regenerating oak hickory forest to get a new overstory someday to be like the current ones seen on the Hoosier's range. In providing proper conditions for oak regeneration the mid story removal is one of many tools needed and I am glad to see it being implemented. I'm glad to see prescribed fire, clearcuts, shelterwoods, and other silviculture being implemented as well.</p> <p>Too often protestors, who have a right to protest, but who lack the expertise in forest management, make it their business to stall, stifle, and stagnate valuable forestry efforts. It is important for the Forest Service to stand their ground and set the agenda in a strong and purposeful way. Don't just react and allow the process to be slowed down and/or abandoned.</p>	Thank you for your support.

7-2	Evan McDivitt 12-4-2018	It will be important to ensure access to all Hoosier National Forest tracts and this process may involve working with old and unimproved county roads. Oftentimes in southern Indiana counties have abandoned historical access points rendering tract access in a state of limbo (is it private now or is it still a county road?). Make sure to be strong and work within all the force of real estate law if necessary to get access to tracts that you had historic access to. These areas, if they exist, should be open for resource management and for public access with good roads and legal passage. Ensuring good access will help patrol for illegal ATV use on public lands as well, which happens way too much. A skid trail will heal and hardly be noticeable but an ATV trail, used frequently, will do more damage to the woods and soils.	Comments noted
8-1	Randy Forgey 12-6-18	Does the land inside the largest blue circle include Fimreite or Forgey land?	Yes, both properties are adjacent to the proposed treatment area.
8-1.2	Randy Forgey 12-6-18	How far away from the private land are the two planned road additions that are circled in blue?	The circled road to the north is about .2 mile from private land and the southern one is about .1 mile. These were estimated locations at the time of scoping. We now have a better idea of locations as reflected in the proposal.
8-1.3	Randy Forgey 12-6-18	If the project does include Fimreite or Forgey land, how does the prescribed burn affect the current trees now?	The effects of a prescribed fire are sometimes difficult to describe as they are rarely binary. However, in the central hardwood region prescribed fires, and wildfires for that matter, are in the low to moderate intensity range depending on overall dryness and weather. By and large, the overall effects include the top killing of trees 2-3" in diameter and smaller (saplings), stimulation of the herbaceous layer (grasses and forbs), and little to no residual damage to overstory timber. Overall, a more "park-like" setting develops after burning is completed. The repeated top-killing of smaller trees sets up the next stand of timber as some species are adapted to regular top-killing while others are not. In our case, oak and hickory are very well adapted to repeated top-killing

			<p>while beach and maple are not. Over the course of 2-3 burns, beach and maple regeneration (saplings) are not able to compete with the oaks and hickories over much of the burned area allowing for the retention of oak and hickory into the future stand. Burning also consumes leaf litter which removes a barrier to seedling establishment by acorns and hickory nuts. Without it, oak-hickory forest on south slopes and ridgetops will be replaced with beach-maple forest in the future. Historically, beach and maple were found primarily on north slopes and coves.</p>
8-1.4	Randy Forgey 12-6-18	We have not sold timber from that area and do not want the timber to be damaged.	<p>We would not conduct a prescribed burn on private land unless the landowner would want to participate.</p> <p>U.S. Forest Service fire managers work closely with the National Weather Service to determine the best days to burn to achieve the goals and to maximize safety. Many specific conditions must be met for a burn to occur, including fuel moisture, wind speed and direction, relative humidity, etc.</p>
8-1.5	Randy Forgey 12-6-18	We are also concerned about the two planned roads. We have a lot of problems with trespassers at this time. We are concerned with building roads that close to the property will in fact make that worse.	The lengths and locations of proposed road construction were estimates at the scoping period. Using your concerns regarding trespass, we have analyzed this further and now have a more concrete proposal included the draft environmental assessment.
8-1.6	Randy Forgey 12-6-18	I would also like to know how a prescribed burn would affect us.	<p>Prescribed burns are planned to limit the exposure on the surrounding landowners and communities. Wind directions are selected to minimize smoke exposure.</p> <p>If you choose to participate in a prescribed burn, we would only ask that you, or any of your agents, not occupy the prescribed burn area during burn operations and be extremely cautious entering the area directly afterwards. There are not any restrictions placed on your property</p>
8-2	Randy Forgey 12-27-18	I am thinking the roads wouldn't be too bad if they are obliterated after they are used as you have stated. At least starting at the closest point near our property and obliterate them from there for at least a half a mile or further. That would at least keep a trespasser from driving up next to the property.	Comment noted.

9-1	Tim Norman 12-11-18	Doesn't want the Hoosier to manage the stand of pine trees to the north of his property (Stand 09120200047039). Turkeys roost in those pines.	Pine stands do provide cover, but the native hardwoods that once inhabited the area provide a much higher quality of habitat and food source for native wildlife.
9-1.2	Tim Norman 12-11-18	Concerns with prescribed burning. On an approximate 20 year old clearcut site, it just now starting to look good.	Effects to visuals were analyzed and effects are disclosed in the draft EA.
9-1.3	Tim Norman 12-11-18	Concerned with proposed road reconstruction near his property (CR 625 N.).	Although not maintained, County Road 625 North is a county road. This was confirmed with the Jackson County Highway Department.
9-1.4	Tim Norman 12-11-18	Concern with closing hickory ridge trails and damaging the trails.	Effects to recreation activities are analyzed and disclosed in the draft EA.
10	Graeme Wilson 12-11-18	<p>I use Lake Monroe recreationally, I drink the water, and I live in the watershed. So I am very much a part of what happens to the lake.</p> <p>I cut trees and try to behave responsibly when it comes to managing the parts of the watershed that I own. I am also a user of print media and I have a respect for the high quality of hardwoods that Indiana produces.</p> <p>I feel I have a citizen's understanding of forest management and would like time to be able to respond to what is going to affect the South Fork of the Salt Creek Watershed.</p> <p>This is a difficult season for most of us to respond quickly and I would appreciate an extension of the comment period to give us time to act responsibly</p>	<p>Response email from District Ranger, 12-11-2018:</p> <p>"Thank you for your interest in the Hoosier National Forest, your public lands. However, I am not extending the scoping period and my reasons are listed below.</p> <p>We are currently in the scoping period of the National Environmental Policy Act (NEPA) process, which is an opportunity for the public to provide the Forest Service with thoughts on the initial proposal, any concerns and any relevant information they think we should consider in our analysis. The Responsible Official will then review every comment with an interdisciplinary team to help inform our analysis. Next summer, once it is complete, the public will have another opportunity to comment on the analysis prior to any decision being made on the proposal. When our analysis comes out for comment, you will be able to see how we analyzed potential impacts to the resources and what scientific data we used to inform our analysis.</p> <p>We have strived to make people aware of this proposal for many, many months. To date, I'd like to also point out that a presentation was given at a public meeting in Bedford back in September discussing the early stages of this proposal, the Forest Supervisor, Michael Chaveas delivered another presentation on the proposal and took questions at the Monroe Co. public library in October, and he also hiked with several interested parties in part</p>

			<p>of the project area in November to discuss the project. The scoping letter was posted on our website and social media, press releases were sent to multiple papers, more than 200 hardcopy letters were mailed and over 80 emails were sent out with the scoping letter attached. We are also planning on having one or more open houses during the next comment period to give the public a place to come learn, ask questions, and have their voices heard.</p> <p>Please see the following definition of scoping: <u>NEPA scoping process</u> The process of scoping is an integral part of environmental analysis. Scoping includes refining the proposed action, determining the responsible official and lead and cooperating agencies, identifying preliminary issues, and identifying interested and affected persons. The results of scoping are used to clarify public involvement methods, refine issues, select an interdisciplinary team, establish analysis criteria, and explore possible alternatives and their probable environmental effects.</p> <p>Thanks again for your interest and please let me know if you have any other questions or concerns.”</p>
11	Amy Lifton 12-11-18	I am writing to urge you to extend the public comment period for the Houston South project. This is the busiest time of year for families, and the public needs both more information and more time to process and understand that information, so they can make informed decisions and comments on the project. Please do not rush this through during this holiday season.	See Response #10

12	Doug Davis 12-11-18	<p>It was with great interest that we read a guest editorial in today's Herald Times concerning this plan. The article noted that a request for an extension for comments and review was denied.</p> <p>In view of the magnitude of this project and its impact on our area, we urge you to strongly consider extending the comment period. We would like to study this issue more. It also seems logical and pertinent to have a widely-advertised public workshop on this issue.</p>	See Response #10
13-1	Mary Reardon 12-11-18	I'm writing to ask for an extension for public comment on the Houston South Lake Monroe Project. We need a widely advertised public workshop to explain the detailed plans for Houston South.	See Response #10
13-2	Mary Reardon 12-17-18	The south fork of Salt Creek is one of the most impaired sections of Lake Monroe. Are the benefits of the proposed plan worth the risk of impacting the water quality of Lake Monroe and our drinking water supply?	The draft EA discloses the effects to soil and water.
13-2.2	Mary Reardon 12-17-18	How will the project impact the Knobstone trail with regards to hiking route and the beauty of the scenery?	Effects to recreation and visual quality are included in the draft EA.
13-2.3	Mary Reardon 12-17-18	Much of the project includes steep slopes and fragile soils that are susceptible to erosion.	Potential soil erosion was analyzed and effects are disclosed in the draft EA.
13.2.4	Mary Reardon 12-17-18	<p>It seems as though the Hoosier National Forest is shoving this project through without enough public input.</p> <p>We need time for the public and professional input to carefully assess the sensibility of this project.</p>	See Response #10
14-1	Monroe County Council 12-11-18	<p>The Monroe County Council requests a 30-day extension to scoping period. We are concerned that Hoosier National Forest has not provided adequate information or time to provide the specific and detailed comments that you are asking for.</p> <p>Lake Monroe and its watershed are of vital importance to Monroe County. Lake Monroe is the sources of drinking water for more than 120,000 people. About 1 million people visit the lake each year, bringing income</p>	<p>Response letter from District Ranger, 12/13/2018</p> <p>"I would like to start out by saying thank you for your interest in the Hoosier National Forest, your public lands.</p> <p>I understand that Lake Monroe and its watershed are of vital importance to Monroe County and other interested publics. That is why during our analysis, we will be sure to analyze any and all potential affects our proposal may have if implemented.</p>

	<p>to many businesses in Monroe County and other counties in the area. The Houston South project is proposed to fulfill objectives identified in the 2006 Hoosier National Forest Management Plan. Since 2006, harmful algae blooms and other water quality concerns in the lake and watershed have been identified by the Indiana Department of Environmental Management. These algae blooms also complicate the drinking water purification process and contribute to the formation of harmful disinfectant by-products. Additionally, these processes increase the cost of water purification, thereby economically impacting our public and private water-providers and ultimately our residents.</p> <p>Monroe County is working to improve the water quality of Lake Monroe, recognizing that the minor issues we face today could become major issues if we do not take a proactive stance in protecting the lake and its watershed. To this end, the Monroe County Council has committed \$37,000 in matching funds for a project to develop a watershed management plan to identify and eliminate sources of sediment, nutrients and other pollutants that are a threat to Lake Monroe water quality. It is our responsibility to work with Hoosier National Forest and others to ensure that any major project proposed within the Lake Monroe watershed does not further degrade water quality.</p> <p>The Forest Service has given the public and local government 30 days, during the busy end-of-year and holiday season, to send “site specific comments about the proposal along with supportive information to help identify issues, develop alternatives, or predict environmental effects”. Local government, and additionally the general public, needs time and opportunity to learn more about this project and provide input before the process moves forward in the scoping process.</p>	<p>As you know, we are currently in the scoping period of the National Environmental Policy Act (NEPA) process, which is an opportunity for the public to provide the Forest Service with thoughts on the initial proposal, any concerns and any relevant information you think we should consider in our analysis.</p> <p>In order to be most helpful to the planning and analysis process, we are asking for timely comments during this scoping period, to be sent to us by December 26th. However I will review every comment with an interdisciplinary team to help inform our analysis even if I receive comments this deadline. Providing timely comments helps us make efficient progress in our process, allowing us to more quickly provide the more detailed information about this proposal which the Council and others are requesting. Next summer, once the analysis is complete, the public will have another opportunity to comment on the proposal prior to any decision being made. When our analysis comes out for comment, you will be able to see how we analyzed potential impacts to the resources and what scientific data we used in guiding our analysis.</p> <p>We have strived to make people aware of this proposal for many months. To date, I'd like to also point out that a presentation was given at a public meeting in Bedford back in September discussing the early stages of this proposal. Forest Supervisor, Michael Chaveas delivered another presentation on the proposal and took questions at the Monroe County public library in October, an event which was also livestreamed on Facebook and broadcast on community access television, and he also hiked with several interested parties in part of the project area in November to discuss the project.</p> <p>Representatives of Friends of Lake Monroe were present at each of these events. The scoping letter was posted on our website and social media, press releases were sent to multiple papers, more than 200 hardcopy</p>
--	--	---

		<p>We are also concerned, and you are aware, that there has been a problem with receipt of the scoping letter. Because of the delivery method, the scoping letter was sent to the junk mail of many recipients. We suspect there are many interested parties who should be notified by another method and we suggest a new dissemination of the scoping letter.</p> <p>In order for us to provide comments we require more information than is contained in the scoping letter. We request that, in the interest of obtaining the broadest and most comprehensive public comment, a widely advertised public workshop is conducted to provide the public with detailed maps, explanations of the proposed procedures and opportunities to ask questions and provide comments.</p>	<p>letters were mailed and over 80 emails were sent out with the scoping letter attached. While we regret, and cannot control, the fact that some of these emails may have gone to junk mail folders, the information was made available widely through those other avenues named above.</p> <p>The stage of the NEPA process which we are in is referred to as “scoping”. Please see the following definition of scoping:</p> <p><u>NEPA scoping process</u></p> <p>The process of scoping is an integral part of environmental analysis. Scoping includes refining the proposed action, determining the responsible official and lead and cooperating agencies, identifying preliminary issues, and identifying interested and affected persons. The results of scoping are used to clarify public involvement methods, refine issues, select an interdisciplinary team, establish analysis criteria, and explore possible alternatives and their probable environmental effects.</p> <p>During the scoping phase we do not yet have the details of the project and its potential effects which the Council and Friends of Lake Monroe are requesting. Once we do have those details, they will be made available to the public and another formal comment period will be held. We are planning on having one or more open houses during that comment period to give the public a place to come learn, ask questions, and have their voices heard. This event or events will occur during the comment period (summer 2019) when our analysis will be complete and the public can then ask specific and more detailed questions about the outcomes of our analysis. When we have a venue secured and more information about how this open house will be held, we will let you and the public know.</p>
--	--	---	---

			<p>The intent of scoping is for interested parties to identify concerns with the basic proposal, which we then use to inform our analysis and mold the proposed action if needed. Your letter of December 11 is a good example of a scoping response, as it identifies your concerns about water quality in Lake Monroe and sources of sediment and nutrient delivery to the lake. These concerns will be considered and addressed in our analysis. Should you have remaining concerns when you see those results, we encourage you to comment again and specify what those are.</p> <p>Again, thank you for your interest in the Hoosier National Forest and you can submit comments to comments-eastern-hoosier@fs.fed.us. If you would like more information or have any questions regarding the commenting process, please contact Kevin Amick, Environmental Coordinator Hoosier National Forest @ kevin.amick@usda.gov or myself. You can also follow any or all the instructions in the scoping letter posted on our website at: https://www.fs.usda.gov/project/?project=55119.”</p>
14-2	Monroe County Council 2-13-19	<p>Sediment poses a major threat to the environmental and economic health of Lake Monroe.</p> <p>The US Army Corps of Engineers identifies harmful alae blooms (HAB) as widespread problems for...Lake Monroe... They identify sedimentation as a major contributor and predict HAB problems will worsen. Purdue University’s recent climate study also predicts that algae problems will worsen.</p> <p>The EPA rates sediment as the most serious threat to water quality. Any land-disturbing activity such as logging, road building or construction creates potential for runoff.</p> <p>For the past seven years IDEM has issued Recreational Advisories for Lake Monroe due to algae</p>	<p>The <i>Lake Monroe Diagnostic and Feasibility Study</i> states, “As with agricultural BMPs, there are adequate silviculture BMPs available for application in Lake Monroe’s watershed, but many landowners must be educated on their proper use.” It also states, “The implementation of agricultural, forestry, and urban BMPs has been proven over the years to be very effective in reducing watershed erosion and runoff, and ultimately, in reducing the delivery of NPS pollutants to lakes” (Jones et al. 1997).</p> <p>Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs for water quality standards, Forest Plan standards take precedence.</p>

		<p>contamination. This is not an isolated problem, but one that threatens numerous reservoirs in our state.</p> <p>Algae contamination not only threatens our health, but its potential economic impact is large. One such example in Ohio... The lakes became overgrown with algae. ...lakefront homeowners list an estimated \$150 million in property value over six years as a result of the insufficient protection of those waters.</p> <p>We know that Lake Monroe...is an economic engine for surrounding communities. The one million annual visitors to Lake Monroe for boating, fishing, birding, and other wildlife viewing, swimming, and camping all play a significant role in our local economy. Our public lands, including Hoosier National Forest, are important components and contributors to our economic vitality.</p>	<p>The US Army Corps of Engineers <i>Louisville District Water Quality Program Management Plan</i> states: "General contributing factors that promote the formation of HABs are:</p> <ul style="list-style-type: none"> • Ample sunlight • Warm temperatures • Low-water or low-flow conditions • Excessive nutrients (nitrogen and phosphorus)" <p>Additionally, the Water Quality Program Management Plan states: "...one of the most influential factors of HAB growth is the concentration of nutrients such as nitrogen and phosphorus. Most nitrogen and phosphorus pollution (i.e., eutrophication) comes from the runoff of agricultural fertilizer, lawn fertilizer, untreated human sewage (storm overflows) and untreated animal sewage from concentrated animal feeding operations."</p> <p>The referenced Purdue University document, does state that "Warming waters, combined with elevated nutrient levels, will lead to more algal blooms, reduced water clarity, and depleted oxygen levels." However, the document also states: "Increased runoff and drainage will carry more nitrogen and phosphorus from farm fields and deposit them into nearby streams and bodies of water. An increased flow of nutrients into water would speed up growth of bacteria and algae."</p> <p>Studies referenced by the U.S. Geological Survey (USGS) found excessive nutrients, primarily nitrogen and phosphorus, can lead to eutrophication. The USGS's Spatially Referenced Regression on Watershed attributes (SPARROW) model identified corn/soybean row crop as the main contributor of total nitrogen loads, while phosphorus loads were linked to non-recoverable manure from pastures (Bunch 2016).</p> <p>The EPA reference, <i>Stormwater Phase II Final Rule: Construction Site Runoff Control Minimum Control Measure</i> states: "Sources of sedimentation include</p>
--	--	---	---

			<p>agriculture, urban runoff, construction, and forestry. Sediment runoff rates from construction sites, however, are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands.” The document discusses construction sites, it does not reference logging or roads.</p>
14-2.2	Monroe County Council 2-13-19	<p>You do not have to conduct this timber management project in the Lake Monroe watershed. There are alternative locations to choose from.</p> <p>Of the 203,000 acres of HNF, 44% is General Classification (Area 2.8) which permits, but does not require, commercial logging. We know in the northern Brownsville district, in which the Houston South Project lies, there are many other 2.8 Areas that do not directly supply surface runoff for community drinking water.</p> <p>We would like to work with you to help reach your forest management objectives without conducting these logging operations in the Lake Monroe watershed. What alternatives did you consider when you first started working on the Houston South Project several years ago. Would you take us through how you compared those alternatives? We would like to engage with you in a discussion about these and other alternatives before you develop your final plan,</p>	<p>Point of clarification, it is actually the Brownstown Ranger District.</p> <p>The proposed project occurs in the South Fork Salt Creek watershed, not the Lake Monroe-Salt Creek watersheds. That said, the Forest Plan EIS analyzed effects to municipal watersheds (USDA FS 2006b, pages 3-230 to 3-321). The Forest Plan, tiered to the Forest Plan EIS, determined that timber harvest is an appropriate management tool for use in this area.</p> <p>We do not expect this project to have negative effects to Lake Monroe. Effects to soil and water resources are included in the draft EA.</p>
14-2.3	Monroe County Council 2-13-19	<p>One of your goals is to “maintain and restore watershed health.” Lake Monroe is the sole source of drinking water for the 85,000 residents of Bloomington and tens of thousands of other Monroe County residents. We hope you agree that our waters are threatened and that we must not just continue on the same track, but seek to reduce the sources of contamination. In the face of uncertainty stemming from climate change and development pressures, we must be vigilant.</p> <p>We invite you...to attend a Council meeting to discuss the Houston South Project. We hope this becomes part of broader efforts to hold public forums...</p>	<p>We do not expect this project to have negative effects to Lake Monroe. Effects to soil and water resources are included in the draft EA.</p>

15	Henrietta Grossoehme 12-11-18	Please extend the scoping comment period for the Houston South project.	See 1 Response #10
16	William Smith 12-11-18	I write to express my support of Monroe County Council member Shelli Yoder's call for more time for public input on the Houston South project. Given the immense impact such a project would have on Lake Monroe and other environmental concerns, we should proceed with all due caution. Please extend the public comment period for this project.	See Response #10 and 14-1
17-1	Jana Pereau 12-11-18	You really need to give the citizens and local governments more time to consider this proposal which heavily impacts our water supply and the recreational uses in our region.	See Response #10
17-2	Jana Pereau 12-11-18	The herbicide is especially concerning given the potential for runoff into our drinking water but the logging is also a concern. We have witnessed the destruction of natural areas in our forests as the heavy equipment trashed the slopes, soils and habitat in the extraction process.	Effects to soil, water, and herbicide use are included in the draft EA.
17-3	Jana Pereau 12-11-18	Over 12,000 acres? For a few thousands of \$ worth of lumber? Not worth it. You can call it restoration all you want; this does not change the facts on the ground. Devastation and waste and the citizens get nothing in return	Timber harvest is a management tool to accomplish the proposed action, not the reason for the project.
18-1	James Townsend 12-12-18	Lake Monroe and its substantial water-shed territory, is of immense importance to the State of Indiana, critically for the clean water supply for southern Indiana as well as for the recreational enjoyment of its citizens and the commercial viability of the large recreational industry of the State. Please seriously consider an extension for at least 30 days for public comment and discussion on the proposed Houston South Vegetation Management and Restoration Project.	See Response #10
18-2	James Townsend 12-13-18	Thank you for your informative reply to my letter. Even though I may not agree on all points with you, I do appreciate your huge responsibilities with regard to our life-sustaining environment and your polite response to my concerns.	Thank you for your response.

19	Paul Eisenberg 12-12-18	I'm worried about the possible bad effects on the water in Lake Monroe due to the proposed use of pesticides in the forest. Accordingly, I do want there to be a well-advertised public workshop, as recommended by the Monroe County Council and Friends of Lake Monroe.	See Response 17-2 and 14-1
20-1	Bloomington City Council 12-12-18	<p>The Bloomington City Council requests a 30-day extension to scoping period. We are concerned that Hoosier National Forest has not provided adequate information or time to provide the specific and detailed comments that you are asking for.</p> <p>Lake Monroe and its watershed are of vital importance to City of Bloomington. Lake Monroe is the sources of drinking water for more than 120,000 people. About 1 million people visit the lake each year, bringing income to many businesses in Monroe County and other counties in the area. The Houston South project is proposed to fulfill objectives identified in the 2006 Hoosier National Forest Management Plan. Since 2006, harmful algae blooms and other water quality concerns in the lake and watershed have been identified by the Indiana Department of Environmental Management. These algae blooms also complicate the drinking water purification process and contribute to the formation of harmful disinfectant by-products. Additionally, these processes increase the cost of water purification, thereby economically impacting our public and private water-providers and ultimately our residents.</p> <p>The City of Bloomington is working to improve the water quality of Lake Monroe, recognizing that the minor issues we face today could become major issues if we do not take a proactive stance in protecting the lake and its watershed. To this end, the City of Bloomington Utilities has committed \$37,000 in matching funds for a project to develop a watershed management plan to identify and eliminate sources of sediment, nutrients and other pollutants that are a threat to Lake Monroe water quality. It is our</p>	<p>See Response 14-1</p> <p>Studies referenced by the U.S. Geological Survey (USGS) found excessive nutrients, primarily nitrogen and phosphorus, can lead to eutrophication. The USGS's Spatially Referenced Regression on Watershed attributes (SPARROW) model identified corn/soybean row crop as the main contributor of total nitrogen loads, while phosphorus loads were linked to non-recoverable manure from pastures (Bunch 2016).</p> <p>The U.S, Army Corps of Engineers LRL Water Quality Program Management Plan states, "General contributing factors that promote the formation of HABs are: ample sunlight, warm temperatures, low-water or low-flow conditions, and excessive nutrients (nitrogen and phosphorus)."</p> <p>"Most nitrogen and phosphorus pollution (i.e., eutrophication) comes from the runoff of agricultural fertilizer, lawn fertilizer, untreated human sewage (storm overflows) and untreated animal sewage from concentrated animal feeding operations." Timber harvesting is not mentioned as a contributor to harmful algae blooms</p> <p>We do not expect this project to have negative effects to Lake Monroe. Effects to soil and water resources are included in the Draft EA.</p> <p>Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs for water quality standards, Forest Plan standards take precedence.</p>

		<p>responsibility to work with Hoosier National Forest and others to ensure that any major project proposed within the Lake Monroe watershed does not further degrade water quality.</p> <p>The Forest Service has given the public and local government 30 days, during the busy end-of-year and holiday season, to send “site specific comments about the proposal along with supportive information to help identify issues, develop alternatives, or predict environmental effects”. Local government, and additionally the general public, needs time and opportunity to learn more about this project and provide input before the process moves forward in the scoping process.</p> <p>We are also concerned, and you are aware, that there has been a problem with receipt of the scoping letter. Because of the delivery method, the scoping letter was sent to the junk mail of many recipients. We suspect there are many interested parties who should be notified by another method and we suggest a new dissemination of the scoping letter.</p> <p>In order for us to provide comments we require more information than is contained in the scoping letter. We request that, in the interest of obtaining the broadest and most comprehensive public comment, a widely advertised public workshop is conducted to provide the public with detailed maps, explanations of the proposed procedures and opportunities to ask questions and provide comments.</p>	
21-1	Amanda Barge Monroe County Commissioners 12-12-18	The Monroe County Board of commissioners are supportive of the Friends of Lake Monroe’s request for a 30 day extension to the scoping of the Houston South Vegetation Management and Restoration Project.	Comment noted.
21-2	Amanda Barge Monroe County Commissioners	The USDA and the Forest Service did not provide appropriate notice for impacted communities (erosion, smoke, and drinking water impacts), including Monroe	See Response 14-1

	12-26-18	County (Lake Monroe Reservoir). We would appreciate additional time for the opportunity to ask questions and consider supplemental information. Please send copies of future correspondence and information on this topic to the Monroe County Board of Commissioners (100 W. Kirkwood, Bloomington, IN 47404).	
21-1.2	Amanda Barge Monroe County Commissioners 12-26-18	<p>While it is evident that the most significant impact of the Houston South plan will fall predominantly on Jackson County, the area in question is part of the watershed of the Lake Monroe Reservoir. Lake Monroe serves as a water source for a significant portion of Monroe County, including Bloomington. There are two specific concerns related to this proposal and its potential impact on the quality of the drinking water:</p> <p>a. Erosion control is not sufficiently described in the plan. Lake Monroe already faces critical challenges with sedimentation. What erosion control measures will prevent future sedimentation? While the letter outlines measures to reduce erosion (roadway and trail improvements), these do not appear to be sufficient to overcome the additional erosion that will result from the clear-cutting, burning and herbicide use. In addition to the significant erosion of clear-cutting, burning, and the application of herbicides, road construction (and destruction) in the process of commercial logging creates additional erosion. How will erosion be controlled?</p> <p>b. Herbicides are a significant concern to the residents of Monroe County who rely on Lake Monroe as a drinking water source. The project information dated November 26, 2018 references the Tell City Barrens Restoration project. However, it is not clear whether the same herbicide(s) will be utilized and how the impact of the herbicide will be addressed. In addition, the 100' rule from the Tell City Barrens Restoration project does not account for the impact of herbicides into Lake Monroe as it flows into the drinking water supply from the watershed area.</p>	<p>See Response 14-1</p> <p>Erosion mitigation was addressed in the draft EA.</p> <p>Herbicide use was analyzed in the draft EA.</p>

21-1.3	Amanda Barge Monroe County Commissioners 12-26-18	<p>“Minimize the use of triclopyr (ester formulation) or surfactants used with glyphosate (terrestrial version) within ephemeral, intermittent, or perennial stream corridors, or within 100’ of caves, karst features, lakes, ponds, or wetlands; Otherwise, minimize all herbicide application at cave entrances, karst features, lakes, ponds or wetlands” (pages 25-26 of Environmental Assessment Tell City Barrens Restoration, July 2018).</p> <p>For decades, studies of Glyphosate have connected the herbicide with a higher incidence of cancer in human and animal populations. While there does not appear to be a consensus agreement among researchers about the incidence of cancer in humans as a result of glyphosate exposure, recent lawsuits against Roundup brand herbicide (glyphosate) should be noted. Studies on the impact of Glyphosate on animal and insect populations (especially bees – an important part of any forest management project) is more consistent (see below). To purposefully introduce this chemical into the forest and into the drinking water supply for our community is beyond reckless.</p>	Herbicide use was analyzed in the draft EA.
21-1.4	Amanda Barge Monroe County Commissioners 12-26-18	<p>The scope of the proposal lacks sufficient information and detail:</p> <p>a. The project map shows about half of the Hoosier National Forest in Jackson County is part of the proposed burn area. What does this mean? Is this a partial burn? Over what time period? Years? Will the impact of air pollution on area residents be tracked? How will issues be resolved?</p> <p>b. What accommodations are made for changes in our climate? While oak and hickory species appear to be the ideal in this report, a diverse forest makes more sense when diseases and insects appear that decimate one tree species (emerald ash borer, for example). What if an oak disease is next? In addition, with changes in rainfall rates, the possibility of erosion is</p>	<p>a. As stated in the scoping letter, the burn acreage would be split up into smaller units in areas with or without timber harvest across the project area. The boundaries for these treatments would take advantage of topography and other features such as roads and trails. These burns would be completed over the life of the project. Effects of prescribed fire are included in the draft EA.</p> <p>b. Climate change was addressed in the draft EA.</p> <p>c. See Proposed Action in the draft EA.</p> <p>The word restoration is not a misnomer. The proposed action is based on and would fulfill Forest Plan direction associated with the goal of maintaining and restoring sustainable ecosystems.</p>

		<p>much higher now than it was 20 years ago, especially following a mass burning event.</p> <p>c. What are the proposals for rejuvenating the forest? The word “restoration” is a misnomer. Where is the management?</p> <p>d. What does the Army Corps of Engineers have to say about this plan? The master plan for the Lake Monroe Reservoir offers insight on the negative impact of logging, the use of chemicals (fertilizers and herbicides) in the watershed, and the importance of controlling erosion. What is the likely impact of herbicides on Lake Monroe as a source of drinking water and on the environmental health of the Reservoir (aquatic plants and animals, etc.)? (link provided)</p>	<p>d. The Army Corps of Engineers did not respond to the scoping letter.</p> <p>The March 4, 2016 <i>Monroe Lake Master Plan</i> does not mention herbicides or logging on National Forest System lands. It does mention timber management on Corps and IDNR managed lands: “Timber production can be implemented through sustained yield programs, reforestation and accepted conservation practices, provided that such development and management shall be accomplished to the extent practicable and compatible with other uses of the project (PL. 86-717 Sec 1.) page 1-6</p> <p>“...IDNR has a timber management Memorandum of Understanding (MOU) with the USACE for timber harvesting to provide early successional woodland habitat diversity.” page 3-23</p> <p>Herbicides were analyzed in the draft EA.</p>
21-1.5	Amanda Barge Monroe County Commissioners 12-26-18	<p>What are the next steps? Will there be an environmental impact study conducted?</p> <p>Again, we respectfully request that the Monroe County Board of Commissioners is included on all future correspondence.</p>	See Response 14-1
22-1	Michael Welber 12-12-18	I read, with great dismay, that part of the plan to remove trees from the Lake Monroe Watershed includes the use of herbicides. This is horrifying.	Herbicides were analyzed in the draft EA.
22-1.2	Michael Welber 12-12-18	We in Bloomington get our drinking water from what is already a highly compromised lake that must be treated so heavily that we had to install a whole house water filter just to eliminate the powerful smell of chlorine in our drinking water. The lake has been polluted by mercury from the burning of coal, by the effluent of homes on the lake that have septic tanks that often leak, and by the by-products of power boats including fuels that contain benzene and other carcinogens. And	See Response 22-1

		now the plan includes the use of herbicides that are known to be carcinogenic.	
22-1.3	Michael Welber 12-12-18	Are the people planning this insane? The plan is demented in extreme and if you carry through with it I will have to install a costly cistern at my house just I won't be further poisoned by drinking water. I hope that the Friends of Lake Monroe or some other entity files suit to stop you.	Comment noted.
22-1.4	Michael Welber 12-12-18	Stop. Think. OK, cut the trees but don't use herbicides in our watershed. It's not your water; it's everyone's water.	See Response 22-1
23-1	Matt Pierce State Rep. 12-13-18	<p>I am writing in reference to the proposed timber management plan in the Hoosier National Forest described as the Houston South Project in the November 26, 2018 Scoping Letter. I share the concerns of my constituents about the proposal to log in the Lake Monroe watershed and its limited public comment period.</p> <p>As you know, Lake Monroe is the sole source of drinking water for more than 120,000 people. The vitality and growth of communities in our region and Indiana University depend on the lake being a clean and sustainable water supply. However, the water quality of Lake Monroe is already under stress. The City of Bloomington that manages the vast majority of the water withdrawn from the lake must already treat the water for elevated algal and organic contaminants. Indiana Department of Environmental Management has issued Recreational Advisories for the past several years due to elevated blue-green algae levels.</p> <p>Limiting the public comment period to only 30 days undervalues the serious nature of your proposal and its potential impact to the area's main water supply. This comment period is especially inadequate because it coincides with the busy holiday season, concluding on the day after Christmas. While the NEPA review process will permit comments in the future, this comment period is the only opportunity for the public to</p>	See Response 14-1

		<p>influence initial decisions about the scope of the project that will be proposed in an Environmental Impact Statement.</p> <p>The proposed Houston South Project affects a vast and complicated watershed, encompassing 432 square miles. All aspects of the proposal must be carefully considered and thoroughly vetted. This cannot be accomplished with an arbitrary, limited public comment period that straddles a busy holiday season when many people travel, businesses and schools close, and people are preoccupied with family commitments.</p> <p>I respectfully request that you extend the comment period for a suitable time so all aspects of the Houston South Project proposal can be adequately considered.</p>	
24-1	Richard Stumpner 12-14-18	<p>First of all let me say that I am a member of Friends of Lake Monroe and I am also a long time forested landowner in Monroe County. While I have concerns about preserving the water quality of the lake and it's watershed, I am also aware of the difficulty of regenerating oak stands by standard practices that have been used in forest management and the need to regenerate oak in our woodlands. I am assuming that oak regeneration is one of the goals of the proposed new management plan. I am very supportive of using science based information to formulate changes in forest management and I think that has been the approach that has been taken in this new plan.</p>	<p>Effects to soil and water were analyzed in the draft EA.</p> <p>Yes, oak regeneration is one of the goals of the proposed project.</p>
24-1.2	Richard Stumpner 12-14-18	<p>Preserving the water quality of Lake Monroe and avoiding any further sediment being deposited in the lake. I hope that the Forest Service will very diligently enforce Best Management Practices regarding erosion control and preventing silt runoff into the watershed. I think many times those erosion control measures fail in heavy rain events and then the damage is done. Erring on the side of being overly cautious is perhaps the best way to approach this potential problem. Maintaining erosion control measures, especially in sensitive sites, well after the logging has been done is also important</p>	<p>Thank you for your comment.</p> <p>Effects to soil and water are included in the draft EA. The Forest uses BMPs and Forest Plan standards and guidelines for erosion control measures.</p>

		to prevent siltation in ensuing years until the vegetation is re-established.	
24-1.3	Richard Stumpner 12-14-18	Protecting against and preventing invasive species from overtaking the management sites. I have seen many times the way that invasives take hold on disturbed sites. The only way that they can be effectively controlled (that I have had any luck with) is by chemical treatment. It is a labor intensive job to control the invasive plants, but careful, diligent application by hand backpack sprayer or by 4 wheeler is effective. Please don't initiate a program of aerial application or broadcast spraying to control invasive plants. I would be especially concerned about that within the lake watershed area.	Thank you for your comment. The herbicide applications you mention are the types the Forest uses (see response 2-5).
25-1	Deborah Reichmann 12-14-18	It has come to my intention of your plans for another logging and controlled burn. As a resident of Monroe County and alumna from SPEA at IU, I have understanding of the negative impacts of soil erosion and leeching on watersheds. Your plans to log in this area are of great concern, as this action will surely affect those of us who use this area for BOTH recreation AND a water source.	Effects to soil and water are included in the draft EA.
25-1.2	Deborah Reichmann 12-14-18	Please reconsider and extend the time frame for public comments and concerns until after the hectic holiday season! It's only right to make the public fully aware of these plans that WILL affect us long term, and involve us in the decision making process. Please Extend the deadline!	See Response #10
25-1.3	Deborah Reichmann 12-14-18	I also ask for a full investigation to the impact on the watershed that is our livelihood, prior to any action!	See Response 25-1
26-1	Gary Hicks 12-14-2018	Here let me say that any management plan that would include logging would be, to me, most undesirable. Most if the original forest in Indiana is long gone. We should be conserving the remaining woodlands.	Thank you for your comment.
27-1	Shellie Yoder Monroe Co. Council	I appreciate your prompt responses to citizens' concerns. I appreciate the consideration of every comment you receive, no matter when you receive it,	See Response 2-8.3

	12-14-18	as stated in your email. Our concern is whether comments will be included in the official NEPA documentation. I hope you can answer that question.	
27-1.2	Shelli Yoder Monroe Co. Council 12-14-18	This project is of utmost importance for a variety of reasons. Very high on the list is our concern about the impact on the Lake Monroe watershed. Would you be willing to have another meeting in Bloomington as you did in Bedford?	See Response 14-1
28-1	Jack Cathcart 12-14-18	From an ecological view, I totally understand the need for clearing and burning areas. Old oak and hickory regeneration, invasive management, etc.	Thank you for your comment.
28-1.2	Jack Cathcart 12-14-18	Where exactly is the proposed area? And why this area in the watershed? If you have a digital map that would be great.	See response 14-2.2.
28-1.3	Jack Cathcart 12-14-18	I'm sure everyone is thinking about it but does this lead to eutrophication? Could you explain how forestry staff prevents runoff?	This is addressed in the draft EA. The Forest uses BMPs and Forest Plan standards and guidelines for erosion control measures.
28-2	Jack Cathcart 12-18-18	While I fully agree with efforts to promote proper successional oak-hickory regeneration and invasive plant management...I am concerned how this project will impact Lake Monroe and the surrounding watershed from sediment run-off and eutrophication? What practices will HNF staff be using to prevent and/or address eutrophication?	Effects to soil and water are included in the draft EA.
29-1	Ellen Siffin 12-14-18	I am emailing to question WHY this is really desirable. Burning 12,500 acres, logging 4,500 acres will destroy many many animals, displace birds, destroy trees vitally needed on planet Earth. Continual spraying of herbicide will further destroy the habitat of all animals in the area, what you identify as 'weeds' are food for many insects and birds and deer.	Please see the Need for the Proposal section of the draft EA. The draft EA discloses the environmental effects.
29-1.2	Ellen Siffin 12-14-18	Just because someone back in 2006, railroaded their agenda through, via the "Hoosier National Forest Management Plan", doesn't mean it was the correct thing to do at the time and certainly given the quality of the water in Lake Monroe is NOT the proper thing to do now.	Comment noted.
29-2	Ellen Siffin 12-22-18	You have a large responsibility in your position to do the best for the public. This plan is only serving the logging community and the death chemical community.	Comment noted.

29-2.2	Ellen Siffin 12-22-18	You should pick up and read Peter Wohlleben's <u>The Hidden Life of Trees</u> . He was a forester in Germany and ultimately he could not tolerate the state mandated practices, so he left his position. In Germany this is very difficult to do as jobs are very limited in this field. According to a New York Times article, in 2016 he is a forester who devotes his professional efforts to preserving the forest rather than managing it for lumber production. It's a short book, an extremely important one.	Comment noted.
29-2.3	Ellen Siffin 12-22-18	This planet we call home is under siege. The ensuing generations may not be able to survive on it as we survive on it now. EVERYONE needs to try their best to do whatever they can to further life on this planet in all it's biodiversity. Turning thousands of acres into what is essentially a dead zone is more than a tragedy, it is down right criminal.	See Response 29-1
30-1	Ken Day 12-15-18	I want to commend you and your staff for implementing the Hoosier National Forest Plan. That plan built on the previous management plan and both had a lot of public input and meetings. The plan is sound and it is time to implement it on the Pleasant Run unit of the Brownstown Ranger District.	Thank you for your comment.
30-1.2	Ken Day 12-15-18	How much of the project area is in the Lake Monroe watershed? Of the proposed projects, how many of each activity is in the Lake Monroe watershed?	<p>U.S. Geological Survey and the U.S. Department of Agriculture, Natural Resources Conservation Service delineated the National Watershed Boundary Dataset. From that dataset, the fifth-level hydrologic unit (10-digit HUC) defines a watershed.</p> <p>The proposed project occurs primarily in the South Fork Salt Creek watershed with a small portion in the Salt Creek watershed. The project area is 35.5% of the South Fork Salt Creek watershed. Total prescribed fire treatments are 20.6% (over a 20 year period) and silvicultural treatments make up 6.7% of the watershed.</p> <p>The four watersheds that ultimately drain into the Lake Monroe Reservoir include the South Fork Salt Creek, Middle Fork Salt Creek, North Fork Salt Creek, and Lake</p>

			Monroe-Salt Creek watersheds. Combined, this area is approximately 276,496 acres. The project area is 8.4% of the combined watersheds. Total prescribed fire treatments are 4.9% and silvicultural treatments make up 1.6% of the combined watersheds.
30-1.3	Ken Day 12-15-18	Table 2 in the scoping letter includes the private land. While this is important for prescribe burning activity it distorts the age class distribution percentages. The age class distribution should be based on NFS lands. To clearly see the age class distribution, the data should be displayed in 10 year increments. Currently the data is lumped for 10-39, 40-59, 60-79, and 80+ years. Laying this out in 10 year increments may help show possible impacts on wildlife in the future do to gaps in age class.	<p>We removed the private land from the table so the percentages only cover NFS land within Management Area 2.8 in the EA.</p> <p>We have displayed the age class distribution as you have suggested in the EA.</p>
30-1.4	Ken Day 12-15-18	This project area is not anywhere near being a fully balanced regulated forest or ecosystem. To help set context, what is the age class distribution for the Management Area? What is the age class distribution for the Pleasant Run unit? What is the age class distribution for the Hoosier National Forest?	Figures 3 and 4 in the draft EA display the age class distribution for the MA 2.8 of the project area and for the Pleasant Run.
30-1.5	Ken Day 12-15-18	The Pate Hollow administrative study was designed to get answers to questions on erosion and nutrient outflows due to timber harvesting. This study was done because of concerns in the 1980s and early 1990s about timber sales in Lake Monroe watershed. Pate Hollow is on the north side of the lake near Paynetown. The study results are documented in Pate Hollow Water Quality Study by Robert G. Moss, dated March 28, 1995. It is 36 pages in length. This will help explain timber harvesting effects.	Thank you for the information.
30-1.6	Ken Day 12-15-18	Also, IU SPEA conducted a study of Lake Monroe watershed in the early 1990s. The Bloomington city and Monroe county officials were involved. As I remember the two key finding were: 1. Erosion from agricultural lands laying fallow over winter. Most notably was the land being managed by the IDNR Division of Wildlife and Fish in the upper lake area being managed for waterfowl. I do not know if that is the case today. 2.	Thank you for the information.

		Cows in the creeks. Cattle were not fenced out of the creek in the upper reaches of the watershed.	
30-1.7	Ken Day 12-15-18	A letter to the editor today makes the herbicide activity sound like the entire 2,154 acres were being treated. I suspect the herbicide to be applied in spot treatment and not 100% applied over the entire acreage. Which interpretation is correct?	You are correct, spot treatment would be allowed within the designated acres, not the entire acreage.
30-1.8	Ken Day 12-15-18	I predict you will be appealed and sued about this project. I urge a thorough analysis using the best scientific information and an objective look at issues and concerns. Do a good job of documentation and build an excellent project record. And the project will be upheld and you can move forward and implement. Good luck.	Thank you for your advice.
31	Roger Kugler 12-15-18	I would like to add a commit on Project #55119. GO FOR IT! I cannot image the frustration you and your colleagues must feel from the commits and criticism you field from Monday morning quarterbacks whose last environment science class was in the seventh grade. I'm glad people are paying attention to their environment but criticism without knowledge and understanding is just noise. Maybe they have never stood in the middle of a dying forest...?	Thank you for your support.
32	Lisa Thomassen 12-15-18	I vehemently oppose the proposed plan for clear cutting, herbicide use, and shelterwood cutting. This is a sensitive site that calls for sensitive and conservative management to protect this watershed, and the drinking water and water quality.	Thank you for your comments.
33-1	Dan Gehring 12-16-18	I support the Houston South Vegetation Management and Restoration Project and encourage prompt project implementation. Further delay of the project will result in further environmental damage; specifically lack of young forest (0-9 year age class at 0%), insufficient oak regeneration, and habitat loss for sensitive species dependent on the young forest environment. Young forest species are declining across the region including many on the verge of extirpation. And, mature forest species that are also in decline, including endangered	Thank you for your support.

		species, have been shown to utilize the abundance of cover and food created by young forest management.	
33-1.2	Dan Gehring 12-16-18	The Houston South Vegetation Management and Restoration Project is managing a complex forest landscape in a way that will promote and encourage native forest community types, add structural diversity, and initiate a process of management that will create and maintain a diversity of age classes across the landscape, mimic natural disturbance events at an appropriate scale, and enhance habitat for declining forest species.	Thank you for your support.
33-1.3	Dan Gehring 12-16-18	The restoration of roads and trails is an important part in the sustainability of this proposed action. The steps include protecting water quality, cultural sites, soil quality and the visual quality of the area. Emphasis should be given to reducing the spread of noxious weed populations and controlling existing non-native invasive species known to occur in the area.	We have develop design measures to prevent the spread of NNIS. Control of existing NNIS would be implemented in accordance with the Forest's Nonnative Invasive Plant Control Program Analysis.
33-1.4	Dan Gehring 12-16-18	Healthy forests make for healthy watershed, Protecting water quality, including the use of Best Management Practices (BMPs), is important with the proposed area draining into the Lake Monroe Watershed, which is a drinking water source in Indiana. The plan includes improvements to drainage on the South Fork of Salt Creek. These improvements in aquatic habitat will help to offset the poor quality in other areas of the general Salt Creek drainage.	Indiana BMPs and Forest Plan Standards and Guidelines would be used to protect water quality.
33-1.5	Dan Gehring 12-16-18	Please expedite the Houston South Vegetation Management and Restoration Project. The health of the local forest, habitat for declining forest species and the ability of Indiana citizens to enjoy and appreciate the diversity of Indiana forests will be enhanced.	Thank you for your support.
34-1	John Byers 12-17-18 Will Drews 12-18-18 Liz Jackson 12-18-18	I am writing to support the implementation of the Houston South Vegetation Management and Restoration Project and encourage the Hoosier National Forest to move forward with the project without delay. This project was proposed in the 2006 Forest Plan and any further delay of the activity will result in further environmental damage; specifically lack of young forest (0-9 year age class), insufficient oak	Thank you for your support.

	<p>Claude Diehl 12-21-18</p> <p>Carl Diehl 12-21-18</p>	regeneration, and habitat loss for sensitive species dependent on the young forest environment. Young forest species are declining across the Central Hardwood Region and mature forest species that are also in decline have been shown to utilize the abundance of cover and food created by young forest management.	
34-1.2	<p>John Byers 12-17-18</p> <p>Will Drews 12-18-18</p> <p>Liz Jackson 12-18-18</p> <p>Claude Diehl 12-21-18</p> <p>Carl Diehl 12-21-18</p>	Based on the map of proposed activities and the table showing the number of acres per management practice the Houston South Vegetation Management and Restoration Project is managing a complex forest landscape in a way that will promote and encourage native forest community types, add structural diversity and initiate a process of management that will create and maintain a diversity of age classes across the landscape, mimic natural disturbance events at an appropriate scale and enhance habitat for declining forest species.	Thank you for your support.
34-1.3	<p>John Byers 12-17-18</p> <p>Will Drews 12-18-18</p> <p>Liz Jackson 12-18-18</p> <p>Claude Diehl 12-21-18</p> <p>Carl Diehl 12-21-18</p>	The restoration of roads and trails is an important part in the sustainability of this proposed action. The steps outlined in the proposed action to reduce potential impacts which includes protecting water quality, cultural sites, soil quality and the visual quality of the area are important and need to be addressed. Emphasis should be given to reducing the spread of noxious weed populations and controlling existing non-native invasive species known to occur in the area.	Thank you for your support. See response 33-1.3
34-1.4	<p>John Byers 12-17-18</p> <p>Will Drews 12-18-18</p> <p>Liz Jackson</p>	Protecting water quality, including the use of Best Management Practices (BMPs), is important with the proposed area draining into the Lake Monroe Watershed which is a drinking water source in Indiana. The plan includes improvements to drainage on the South Fork of Salt Creek. These improvements in	See response 33-1.4

	12-18-18 Claude Diehl 12-21-18 Carl Diehl 12-21-18	aquatic habitat with help to offset the poor quality in other areas of the general Salt Creek drainage.	
34-1.5	John Byers 12-17-18 Will Drews 12-18-18 Liz Jackson 12-18-18 Claude Diehl 12-21-18 Carl Diehl 12-21-18	Please move forward with the Houston South Vegetation Management and Restoration Project as soon as possible. The health of the local forest, habitat for declining forest species and the ability of Indiana citizens to enjoy and appreciate the diversity of Indiana forests will be enhanced.	Thank you for your support.
35-1	James Hart 12-17-18	In the light of the consideration of the federal assault on our waterways and the fact that the recent plan to use herbicide extensively (2100 acres), extensive clear cutting, hardwood thinning, construction or reconstruction of 20 miles of road in the Forest, and given our persistent problem of keeping Lake Monroe water safe for drinking, I wish to oppose this management plan.	Comment noted. Environmental effects are included in the draft EA.
35-1.2	James Hart 12-17-18	We have been fighting the cancer causing properties of the cleansing agents in our water in Bloomington. Water is the necessary condition for life. Lake Monroe, in some real respects the source of life - or at least a necessary condition - is a water playground already. There is insufficient monitoring of the watersheds surrounding the lake because of the state's priorities do not extend to environmental protection.	Impacts to Lake Monroe are not anticipated. See response 35-1.
36	Kyle Dahncke 12-17-18	It's too important to not wait a bit, right?	See Response #10
37-1	Franklin Drumwright 12-17-18	As native to this state, I am always concerned about how trees are removed from state property by loggers and timber buyers. To me, they should leave it as much as it is now, minus the trees they bid for.	The Forest Service is a federal agency under the United States Department of Agriculture. Legal mandates such as the Multiple Use Sustained Yield Act of 1960 and

			National Forest Management Act of 1976 direct the Forest Service on how timber harvest is conducted.
37-1.2	Franklin Drumwright 12-17-18	Why we allow roads to be built on state forest land is beyond my understanding.	The Hoosier National Forest is the Forest Service, a federal agency, not a state forest. New road construction is needed to access the areas proposed for treatment.
37-1.3	Franklin Drumwright 12-17-18	My solution to this logging – rape of my land is that you require loggers to use animals to haul their logs out, not trucks. The practice of clear-cutting, slow motion or otherwise is not needed. By requiring loggers to use animals such as horses, mules or oxen, you create employment for many people, while it may take longer to drag them to a pick up spot. The logging roads left after cutting our trees often take years to go away, drag tracks heal much faster. Other states and some private land owners require this of the loggers. If you drag rather than truck, you often reduce the number of understory (baby trees you say you want) that will survive and more quickly fill the open spaces left behind.	Thank you for your comments.
37-1.4	Franklin Drumwright 12-17-18	If they log only targeted trees, you can leave many to become the old growth we all would like to see more of.	Thank you for your comments.
37-1.5	Franklin Drumwright 12-17-18	Please consider revising your plan for HSM &R, and include animal log removal, decrease the amount of roads you let them add and decrease the understory removal and overstory removal. These things will lead to better water quality in lake Monroe vs what you currently have in proposal #55119.	Thank you for your comments.
37-1.6	Franklin Drumwright 12-17-18	We do not have to cater to loggers at the expense of water quality. Your current proposal just draws out the logging process and allows for more erosion than need be. In using animals vs. trucks, you reduce air pollution, ruts, a lot of logging roads and leave the forest healthier with careful selection of trees to be logged vs ones that will become the old growth of tomorrow.	See response 35-1.
37-1.7	Franklin Drumwright 12-17-18	Please reconsider your proposal #55119 and revise it. We need higher water quality, not more logging road	Thank you for your comments.

		ruts or indiscriminant trees cut down for the sake of loggers getting to their trees.	
37-1	Ellen Stauffer 12-17-18	I am writing to ask that the proposed logging and use of herbicide in the Hoosier National Forest and Monroe County Watershed area as part of the Houston South Vegetation Management and Restoration Project be reconsidered. There has not been enough time for scientific study regarding how this will affect the water quality and wildlife in the area. At the very least, the public comment period should be extended and the use of herbicides should not be considered.	See Response #10
37-1.2	Ellen Stauffer 12-17-18	Most herbicides are carcinogenic and harmful to local bee and insect populations. Using herbicides on such a large portion of wild land in a watershed area is irresponsible, unnecessary, and will have long term health consequences for the plants and animals in the area and the people that drink water that comes from that area.	Herbicide use is analyzed in the draft EA.
37-1.3	Ellen Stauffer 12-17-18	A justifiable reason as to why the proposed logging actions are required has not been clearly stated. The time frame offered for public comment between Thanksgiving and Christmas is too brief and during a busy holiday season, making it difficult for many to comment. Lack of transparency draws into question the true reasons for the proposed project.	See Response #10
37-1.4	Ellen Stauffer 12-17-18	I would like to see more scientific studies made available to public explaining exactly why the specific logging actions being proposed are necessary, as well as studies outlining the long term effects that the proposed actions will have on the wildlife in the area, the water quality, and the health of the forest.	See Response #10
38-1	Wyatt Guthrie 12-17-18	I am in full support of the FS proposal to perform forest management activities in the area of the forest described in this proposal. My family and I hunt, hike, and camp in this exact location of the national forest regularly, as well as the surrounding areas. We visit this area of the forest probably 15-20 times throughout the year to participate in those activities. I believe that the proposed activities will only increase the	Thank you for your support.

		productivity of the forest, especially white-tailed deer habitat.	
38-1.2	Wyatt Guthrie 12-17-18	I would also be in strong support of similar habitat improvement projects in adjacent areas of the forest in the near future.	Thank you for your support.
39-1	Eric Henderson 12-17-18	<p>I would say that I am in favor of careful forest "management," though I must say the term gives me some pause.</p> <p>When private forests are "Managed" it often is with a mind toward maximizing profit. Not only do they take some mature trees, they take them all, and they go around killing native species that are deemed undesirable.</p>	Thank you for your comments.
39-1.2	Eric Henderson 12-17-18	<p>The page proposing this was vague. Are they going to cut all the wild grapevines? Ring native trees that are not worth money? Leave nasty, rutted logging paths everywhere?</p> <p>If not, explaining this would go a long way toward selling it to the public. A lack of details is suspicious. I'm a hunter and outdoorsman, and I can appreciate GOOD management. If the lack of details bothers me, what do you think it does for the legions of more liberal folks out there?</p>	The purpose and need for the project along with the environmental effects are included in the draft EA.
40-1	Jason Weisenbach 12-17-18	I support the decision to harvest and treat vegetation as needed for the production of proper hardwood forests for the future. I think there needs to be some additional details discussed regarding how the money will be used, exactly what is being done and the like, but in general I support the idea.	Thank you for your support. Environmental effects are included in the draft EA.
40-1.2	Jason Weisenbach 12-17-18	Many of Indiana's wildlife are dropping in population (quail and grouse first come to mind) due to habitat loss. Most of this is due to mismanagement or development. Successional growth of hardwoods is critical for many wildlife species...it's also the natural cycle of things. Not everything stays young forever and not everything old is productive. We need old growth forest habitats...but it can't all be that way. We need a	Thank you for your comments.

		diverse habitat to support diverse wildlife...it's just the way it is.	
40-1.3	Jason Weisenbach 12-17-18	I personally think the funds created from this should stay at the site...not added to the general fund. Use the funds to further improve and manage the site and demonstrate what real management is.	Knutson-Vandenburg (KV) funds generated from the sale of federal timber allows reforestation activities or other renewable resource projects such as wildlife habitat improvement, erosion control, or NNIS control. Amendments to the Agricultural Act of 2014 granted the Forest Service the ability to enter into stewardship contracts or agreements. It allows money generated from the sale of federal timber products to be traded for services to complete authorized stewardship projects. Stewardship projects may include treatments to improve, maintain, or restore forest health; restore or maintain water quality; improve fish and wildlife habitat.
40-1.4	Jason Weisenbach 12-17-18	Too many state and national properties are simply "managed" by doing nothing, yet the forest ages and changes it's growth stage, yet little is done to re-set that. Let this be the start of a rotation of sites where true habitat management takes place... I'm sorry but some people do not understand that cutting down trees can be good for a habitat. In fact in many cases it's one of the best things that can be done.	Thank you for your support.
40-1.5	Jason Weisenbach 12-17-18	You will need to treat for invasives and faster growing shade tolerant trees, and that all needs to be part of this.	Thank you for your comments.
40-1.6	Jason Weisenbach 12-17-18	I hope all goes well and this project can be the beginning of a new process in which we can truly manage for wildlife and their best interests and not be some political issue with some fairly uninformed people creating obstacles... As a hunter, a wildlife and habitat enthusiast, as a fellow Hoosier....you have my support.	Thank you for your support.
40-1.7	Jason Weisenbach 12-17-18	For what it's worth I manage my woods, my farm ground, I plant trees for wildlife, and food plots and plant buffers and have had a timber harvest myself and fight invasives...I know what this takes. I'm one person managing 150 acres... The scope of this project is far greater...but therefore far more impactful. Teddy Roosevelt said, "Conservation is a matter of immensity,	Thank you for your comments.

		not a matter of intensity". This project is one of immensity and thus VERY important.	
41-1	J.M. Canfield 12-17-18	Please leave the forest alone at Houston and any other area of HFN unless public outcry demands that a fix is in order. It appears obvious to me that the Houston project is all about timbering the forest for federal revenue. I firmly believe that when these lands were set aside for public use and enjoyment, timbering or logging of this property was not foreseen as an eventual benefit to the public.	Timber harvest is a management tool to accomplish the proposed action, not the reason for the project. The Multiple Use Sustained Yield Act of 1960 addresses the establishment and administration of national forests to provide for multiple use and sustained yield of products and services, including recreation, range, timber, watershed, and wildlife and fish purposes.
41-1.2	J.M. Canfield 12-17-18	Please leave the area as it is and protect those of us who wish to peacefully use it, by enforcing the laws of its proper use. I have lived adjacent to the forest for 17 years now and spend one to three hours in the forest daily. It is my favorite place to be and I hate to imagine this could happen in my neck of the woods.	Thank you for your comments.
42-1	Antonia Matthew 12-17-18	I'm writing to ask you to give members of the public and local government more time and opportunity to learn about this project and provide input before the process moves forward.	See response #10
42-1.2	Antonia Matthew 12-17-18	I understand that this area, in Jackson County which is already the most impaired part of the Lake Monroe watershed.	Comment noted.
42-1.3	Antonia Matthew 12-17-18	Your project will involve repeated burning and also logging, on a very large area. In addition there will be repeated herbicide use over a 10 year period. I find this assault on the environment and this imperiling of drinking water unacceptable.	Comment noted.
42-1.4	Antonia Matthew 12-17-18	Monroe County officials already have concerns about water quality and are committing \$37,500 in matching funds to work on this problem. The Forest Service needs to be working with local government rather than imposing their plan.	Comment noted.
42-2	Antonia Matthew 12-20-18	I read in the Herald Times newspaper today a letter from someone who has been following the process carefully for sometime and attended your meetings. The letter writer maintains that the project was only discussed in general terms and that more details were expected, but not forthcoming. It looks awfully like non transparent governmental behavior.	The draft EA includes the location, purpose and need for the proposed project, the proposed actions, and the environmental effects.

42-2.1	Antonia Matthew 12-20-18	I wish that you would rethink your position. Clear cutting, burning and spraying with herbicides in a watershed area where drinking water comes from sounds like a really bad idea. Not Green, not considerate of the wild life there.	See response 42-2
43	Donna Rogler 12-18-18	I would like you to know that I am fully in favor of this project and the many benefits it will bring to Southern Indiana forests.	Thank you for your support.
44-1	Mark Stoops IN Senator 12-18-18	<p>My constituents and I are concerned about this proposal to log in the Lake Monroe watershed. First, your requirement to allow only 30 days for public comment undervalues the serious nature of your proposal and its potential threat to a unique and vital resource.</p> <p>As you know, Lake Monroe is the sole source of drinking water for 120,000 or more people. The vitality and growth of many communities and universities in our region depend on the lake being a clean and sustainable water supply.</p> <p>Lake Monroe has significant water quality issues. The City of Bloomington, who manages the vast majority of the water withdrawn, must already treat for elevated algae and organic contaminants. Over the past several years the Indiana Department of Environmental Management has issued recreational advisories due to elevated blue-green algae levels.</p> <p>Secondly, the timing of your comment period until December 26, 2018 ignores the busy holiday season. I understand the NEPA review process will allow for public comment, but it is almost too late at that point in the process as plans will become more concrete. This present timeframe should not be placed on this comment period.</p> <p>This is a vast and complicated watershed, encompassing 432 square miles. All aspects of your proposal need to be considered and thoroughly vetted.</p>	See Response 14-1

		<p>An arbitrary, abbreviated timeline should not be placed on this public comment period.</p> <p>As the State Senator representing Senate District 40, which encompasses the majority of Monroe County and Indiana University, I respectfully ask that you extend the comment period so that residents on both sides of this debate may have an opportunity to voice their opinion.</p>	
45-1	<p>John Hamilton, Bloomington Mayor 12-18-18</p>	<p>I am requesting a 30-day extension to the comment period for scoping for the Houston South Vegetation and Management Project. I am concerned that Hoosier National Forest has not provided adequate information or time to provide the specific and detailed comments that you are asking for.</p> <p>Lake Monroe and its watershed are of vital importance to City of Bloomington. Lake Monroe is the sources of drinking water for more than 120,000 people. About 1 million people visit the lake each year, bringing income to many businesses in Bloomington, Monroe County and other counties in the area. The Houston South project is proposed to fulfill objectives identified in the 2006 Hoosier National Forest Management Plan. Since 2006, harmful algae blooms and other water quality concerns in the lake and watershed have been identified by the Indiana Department of Environmental Management. These algae blooms also complicate the drinking water purification process and contribute to the formation of harmful disinfectant by-products. Additionally, these processes increase the cost of water purification, thereby economically impacting our public and private water-providers and ultimately our residents.</p> <p>The City of Bloomington is working to improve the water quality of Lake Monroe, recognizing that the minor issues we face today could become major issues if we do not take a proactive stance in protecting the lake and its watershed. To this end, the City of Bloomington Utilities has committed \$37,000 in</p>	See Response 14-1

		<p>matching funds for a project to develop a watershed management plan to identify and eliminate sources of sediment, nutrients and other pollutants that are a threat to Lake Monroe water quality. It is our responsibility to work with Hoosier National Forest and others to ensure that any major project proposed within the Lake Monroe watershed does not further degrade water quality.</p> <p>The Forest Service has given the public and local government 30 days, during the busy end-of-year and holiday season, to send "site specific comments about the proposal along with supportive information to help identify issues, develop alternatives, or predict environmental effects". Local government, and additionally the general public, needs time and opportunity to learn more about this project and provide input before the process moves forward in the scoping process.</p> <p>I am also concerned, and you are aware, that there has been a problem with receipt of the scoping letter. Because of the delivery method, the scoping letter was sent to the junk mail of many recipients. I suspect there are many interested parties who should be notified by another method and I suggest a new dissemination of the scoping letter.</p> <p>In order for the city to provide comments we require more information than is contained in the scoping letter. We request that, in the interest of obtaining the broadest and most comprehensive public comment, a widely advertised public workshop is conducted to provide the public with detailed maps, explanations of the proposed procedures and opportunities to ask questions and provide comments.</p>	
46-1	Karen Smith 12-19-18	I appreciate your stating that "I will review every comment with an interdisciplinary team to help inform our analysis even if I receive comments after this deadline." I am nonetheless very concerned about the	Comment noted.

		brevity and timing of the comment period---right between the winter holidays when most people are preoccupied and busier than usual.	
46-1.2	Karen Smith 12-19-18	I attended Forest Supervisor Michael Chaveas' presentation at the Monroe County Public Library in October. He was well-spoken and prepared, yet the information from him and subsequent questions from the audience raised numerous concerns that merit further attention before the National Environment Policy Act (NEPA) scoping phase is closed. For example, one attendee asked an informed question concerning the monitoring and documentation of compliance with logging Best Management Practices (BMGs), expressing the need for transparency and timely public access to such information. Mr. Chaveas' reply to her did not lessen my own concerns; in fact, I have raised the issue of monitoring of BMG compliance on multiple occasions when submitting comments to the Indiana Department of Natural Resources - Division of Forestry regarding proposed logging in various state forests.	Environmental effects are analyzed in the draft EA along with discussions on BMPs.
46-1.3	Karen Smith 12-19-18	You mention in your letter that the NEPA scoping process includes "refining the proposed action, determining the responsible official and lead and cooperating agencies, identifying preliminary issues, and identifying interested and affected persons." You also state that "during the scoping phase we do not yet have the details of the project and its potential effects which the Council and Friends of Lake Monroe are requesting." I would argue that since such details are not available to the public, we are significantly hindered in our ability to submit comments at this early stage which will inform your analysis, refine, and "mold the proposed action if needed."	See Response #10 and 46-1.2
46-1.4	Karen Smith 12-19-18	As a longtime Bloomington resident who is concerned about proposed logging in Hoosier National Forest and potential negative impacts to forest ecosystems and local water quality, I respectfully urge you to reconsider extending the initial public comment period beyond 30 days, especially given its unfortunate timing during the busy holiday season. I would also encourage you to	See Response #10

		hold public hearings regarding the proposed logging sometime in January, so that expanded discussion can take place in an open forum. Without project details and with very limited time to submit feedback on what is available, local citizens may well see this as an administrative process rushing ahead without them, the initial comment period being more or less pro forma.	
46-2	Karen Smith 12-23-18	<p>Oak-hickory currently accounts for 36.8% of acreage in the proposed treatment area versus 12.1% for maple-beech, the next most abundant forest type. Is the strong emphasis on oak-hickory dominance and regeneration an outgrowth of the Hardwood Ecosystem Experiment (HEE) begun in 2006 and scheduled to continue for 100 years?</p> <p>While true that these hardwoods have dominated many Indiana forests for thousands of years, provide important food sources and habitat for native species, and are used by humans for wood products, is that sufficient reason for us to interfere with the processes of natural succession, especially given that many well-intended but misguided interventions, such as planting/introduction of non-native species, have ultimately created unforeseen and intractable environmental problems?</p>	The Houston South Vegetation Management and Restoration Project is consistent with, and implements the 2006 Hoosier National Forest Land and Resource Management Plan.
46-2.2	Karen Smith 12-23-18	What is meant by moving the landscape toward "historic conditions"? In other words, how far back? The USDA document Indiana Forests: 2013 (https://www.in.gov/dnr/forestry/files/foIN_Forests_2013.pdf) comments on major shifts in forest composition over the millennia, from a surge in hardwoods approximately 9,500 years ago to an "invasion" of mesophytic hardwoods, including beech, maple, and ash, during a wetter period 5,000 - 6,000 years ago. It also states: "The forest composition and size structure in Indiana (and throughout the Central Hardwood region) are dynamic and are a product of past disturbances. Sixty years ago forests in Indiana were dominated by oaks (Winters 1953), but the original land surveys prior to widespread	<p>Historical context for the Forest Plan is Pre-European settlement.</p> <p>See Purpose and Need in the draft EA.</p>

		European emigration indicated a balanced mix of oak and beech-maple forest (Lindsey 1997, Potzger et al. 1956, Shifley and Woodall 2007)."	
46-2.3	Karen Smith 12-23-18	Doesn't the promotion of oak-hickory dominance risk undermining forest diversity and food/habitat sources important to a wider variety of plants and wildlife? As pointed out by certified wildlife biologist and licensed forester Matt Ross on the Quality Deer Management Association (QDMA) website: "When managing your property for deer and other wildlife, it's essential to realize that often the best strategy is to create a diversity of vegetative communities, which results in a variety of cover and food sources. This allows room to buffer against times of famine, and it also makes your property attractive to a wide range of deer preferences; in other words, putting all your acorns in one basket can be detrimental in the long run." He further elaborates that "many, many birds and mammals feed on beech nuts, including ruffed grouse, turkeys, wood ducks, blue jays, white-breasted nuthatches, and various woodpeckers, as well as black bear, foxes, squirrels, chipmunks, mice, feral hogs and of course deer. This high level of attractiveness to a variety of wildlife is directly related to the fact that American beech nuts are high in both protein...and fat..., something that acorns are not American beech also provides nesting habitat for a variety of birds, and cavities within older trees provide dens for owls, squirrels and other mammals." (https://www.qdma.com/know-deer-plants-american-beech/)	Many locations in the project area have site characteristics that favor beech and maple. The regeneration of oaks or hickories would not be attempted at those sites. Additionally, there are approximately 5,600 acres where no silvicultural treatments are proposed.
46-2.4	Karen Smith 12-23-18	Question: Does the USDA Forest Service require that discussion of climate change be included in forest management plans? For the project in question, the public definitely needs more information regarding the crucial role of forests in sequestering carbon and helping mitigate effects of climate change and how alterations in forest composition due to proposed logging might affect this ecoservice, either positively or negatively.	The Council on Environmental Quality (CEQ) issues guidance to assist Federal agencies in their consideration of the effects of greenhouse gas emissions and climate change when evaluating proposed Federal actions. This guidance varies between administrations. The Forest Service also provides guidance based on CEQ guidance on how to consider climate change in

			<p>project-level National Environmental Policy Act (NEPA) analysis and documentation.</p> <p>Climate change was addressed in the draft EA.</p>
46-2.5	Karen Smith 12-23-18	<p>In the scoping letter there is no mention of the specific soil types present in the project area.</p> <p>a. What soil types have been identified? Are any of them associated with steep slopes, erosion hazards, equipment limitations, or flooding?</p> <p>b. What specific best management practices (BMPs) will be implemented to mitigate soil compaction, erosion and sedimentation that could result from use of heavy logging equipment and the large-scale road construction/reconstruction mentioned on page 7?</p> <p>c. How will compliance with the above-mentioned BMPs be ensured and monitored? Will the associated data be made readily available to the public?</p>	<p>Soil and water resources was analyzed in the draft EA.</p>
46-2.6	Karen Smith 12-23-18	<p>The scoping letter does not include specific information on sensitive habitat in the project area.</p> <p>a. Have sensitive areas such as springs, seeps, wetlands, ponds, or karst features been identified in the project area?</p> <p>b. If so, what specific BMPs will be employed to protect such habitat?</p>	<p>Habitat Type/Species Association was analyzed in the Biological Evaluation for Regional Forest Sensitive Species section biological evaluation and documented in the draft EA.</p>
46-2.7	Karen Smith 12-23-18	<p>The scoping letter does not mention if a thorough species inventory has been or will be completed prior to proposed logging. Preservation of quality wildlife habitat obviously requires localized knowledge of the species present and their population levels.</p> <p>a. Has a species inventory been conducted for the project area or is one planned?</p> <p>b. Have any state or federally listed rare, threatened, or endangered (RTE) animal or plant species been identified in the project area? If so, how will they/their habitat be protected from disturbances due to logging activity?</p> <p>c. Has Indiana Bat habitat been identified in the project area (maternity roosts, hibernacula, capture locations)? If so, do logging plans include recommended buffer</p>	<p>Threatened and endangered species were analyzed in the Biological Evaluation for Threatened and Endangered Species and documented in the draft EA.</p>

		zones? Is any data available regarding live roost and cavity/den tree density within the project area?	
46-2.8	Karen Smith 12-23-18	<p>I am very concerned about proposed use of herbicides on 2,154 acres in the project area to "control undesirable species sprouting" (page 6). The scoping letter continues: "Proposed herbicides would include only those identified for use under the previous Tell City Barrens Restoration decision (10/22/2018), in which a Finding of No Significant Impact (FONSI) was prepared."</p> <p>a. Is the above-mentioned Tell City Barrens Restoration decision regarding herbicide use based on: Unpublished Biological Evaluation of Effects to Plant and Terrestrial Invertebrate Regional Forester Sensitive Species for the Tell City Barrens Restoration Project (Coon, 2018)? If so, are copies available on request from the HNF office in Bedford?</p> <p>b. What is meant by "no significant impact"? Does this include impacts on wildlife exposed to the herbicides, non-targeted plant species, soil, water? How would potential impacts be monitored?</p>	<p>Spot treatment would be allowed within the designated 1,973 acres (down from the 2,154 acres originally proposed), not the entire acreage.</p> <p>Yes, the Tell City Barrens Restoration decision regarding herbicide use is based on that Biological Evaluation and copies are available upon request from the Hoosier National Forest office in Bedford.</p> <p>"Significance" as used in the NEPA, 42 U.S.C. 4321 et seq., requires consideration of both the context and intensity of the Federal action. There are ten factors considered in evaluating intensity.</p> <p>Effects of herbicides are included in the draft EA.</p>
46-2.9	Karen Smith 12-23-18	<p>Proposed logging activities would include prescribed fire, with fire lines constructed "using nonground disturbing tools such as leaf blowers and chainsaws" (page 7).</p> <p>a. Given the excessive noise/pollution generated by these tools, how would animal and plant life in the project area not be negatively impacted?</p> <p>b. Has the USDA Forest Service conducted any environmental impact studies regarding use of chainsaws and leaf blowers during logging operations?</p>	<p>Effects to wildlife and botanical resources are included in the draft EA.</p> <p>We are not aware of any environmental impact studies regarding use of chainsaws and leaf blowers during logging operations.</p>
46-2.10	Karen Smith 12-23-18	<p>The Hoosier National Forest is a prime area for outdoor recreation and local tourism. The scoping letter comments on page 7 that "the project proposes to use sections of trails during the timber harvests potentially affecting approximately 20.6 miles (emphasis mine) of the 48.7-mile Hickory Ridge trail system and the 3.5-mile Fork Ridge Trail. During project implementation, we would close certain sections of these trails for safety. We would stage</p>	<p>Please refer to https://www.fs.usda.gov/main/hoosier/workingtogether/contracting</p> <p>Forest Service personnel regularly inspect the work of contractors to ensure compliance.</p> <p>The Biennial Monitoring and Evaluation Report is posted on the Hoosier National Forest website.</p>

		<p>project implementation appropriately to minimize impacts on trail use. Upon completion of the project, contractors would be required to return the trail to its original state as much as possible...." Page 8 begins: "It is expected that project implementation would begin in 2020, be staged over time, and may take several years to complete.</p> <p>The work would be completed using contracts as well as Forest Service employees."</p> <p>a. How are contractors vetted for such projects?</p> <p>b. How will contractor compliance with Forest Service BMPs be monitored and enforced?</p> <p>c. Does the Forest Service commit to making regular reports on BMP monitoring and compliance available to the public in a timely fashion?</p>	<p>Forest Service Harvest Inspectors check the effectiveness of the project BMPs.</p>
46-2.11	Karen Smith 12-23-18	<p>I mention BMP monitoring throughout these comments due to its importance and also because I attended a presentation at the Monroe County Public Library on October 25, 2018 ("Friends of Lake Monroe with Michael Chaveas") in which a well-researched question was posed expressing the concern that "Hoosier National Forest has not demonstrated competence" in areas of BMP monitoring and providing annual reports to the public. Can the Forest Service provide a satisfactory response to the above-mentioned attendee's concerns (and mine) re: BMP monitoring and reporting?</p>	<p>The Biennial Monitoring and Evaluation Report is posted on the Hoosier National Forest website.</p>
46.2-12	Karen Smith 12-23-18	<p>The scoping letter regarding the Houston South project leaves me with numerous questions and concerns re: potential disturbance of wildlife and habitat; large-scale road construction that would fragment the landscape and perhaps pave the way for additional aggressive management activities; potential for an increase in invasive species due to soil disturbance and use of heavy logging equipment; negative impacts on tourism and recreational opportunities; and possible negative impacts on water quality within the Lake Monroe watershed, which is already compromised by agricultural runoff and algae blooms</p>	<p>We do not expect this project to have negative effects to Lake Monroe.</p> <p>Effects to soil and water resources, habitat conditions, and potential spread of NNIS are included in the Draft EA.</p>

		(https://www.limestonepostmagazine.com/logging-runoff-5-counties-threaten-health-oflake-monroe/).	
46.2-13	Karen Smith 12-23-18	The summary section of the Hoosier National Forest webpage (https://www.fs.usda.gov/main/hoosier/about-forest) states that "each decision on a management practice is a commitment to enhancing the Forest. Forest managers work closely with the public to develop a shared vision of how the Forest should be managed." To bring about such a shared vision, it is essential for citizens and city and county officials to have much more detail concerning the proposed Houston South project. I very much appreciate the initial scoping period, but given the scale and potential duration of the project, there should also be a public workshop/hearing on the proposal between now and the June 2019 comment period. Local residents and government need additional opportunities to weigh in and pose questions in an open forum, hopefully with Forest Service representatives available to respond to their suggestions and concerns.	Public meetings will occur. You will be notified of those scheduled meetings.
47-1	Daniel Lynch 12-19-18	I am writing to OBJECT to the Bloomington, IN City Council resolution for extension of the pre-established public comment period for the HNF management plan for the Houston South Area. I support the NFS proceeding, without delay.	Thank you for your support.
47-1.2	Daniel Lynch 12-19-18	I attended Mr. Chavez's Oct 2018 public update in the Bloomington Public Library. I also had previously read the HNF management plan. I was impressed with the quality of the NFS Hoosier Forest management plan.	Thank you for your support.
47-1.3	Daniel Lynch 12-19-18	Healthy long term forest management, a healthy watershed, clean water, recreation, wildlife and productive forestry based jobs are compatible. I trust the NFS balances those objectives because I see plans and data. Please request that any organization seeking to delay the NF plan based on watershed damage or drinking water quality produce a water quality risk assessment and data to support a request for change.	Thank you for your support.
48-1	James and Marjorie Cross	We are opposed to the burn and do not want our property to be included in the burn. We do not feel	Comments noted.

	12-19-18	<p>there is such thing as a controlled burn. California is still struggling with their forest fire.</p> <p>We have had our trees assessed for timber and we would lose a lot of money if our land burned.</p> <p>We enjoy the aesthetic value of our land and we would not be around to watch it grow back into a forest if it is burned.</p>	
48-1.2	James and Marjorie Cross 12-19-18	We will contact an attorney if necessary to stop our land from being burned.	That shouldn't be necessary. Prescribed burning would only take place with the approval of the adjacent land owner through a formal agreement.
49-1	Martin and Elizabeth Tobey 12-19-18	My husband and I own property within the South Houston Burn Area and recently received a detailed letter from the USDA Forestry Department describing a comprehensive restoration project for this area/ We found (as I am sure many others did) the plan as written to be challenging to visualize and understand, especially timelines and detailed descriptions of exactly what changes/impact on the land we should expect. In particular, what can we expect on our land, many trees marked with red paint, and on Hickory Ridge horse trails.	<p>You will receive an invitation to an upcoming public meeting. Personnel will be on hand to address any questions you have.</p> <p>If you mean your land as in private land, there are no proposed actions on your private land. If you mean your land as in National Forest System lands, effects are the draft EA.</p> <p>Effects to the Hickory Ridge Trail system are be analyzed in the draft EA.</p>
49-1.2	Martin and Elizabeth Tobey 12-19-18	Our hope is that you will host a town hall meeting with maps and visual aids with clear explanations to show where, when, and what will be transpiring and for how long in this area.	See response above.
50-1	Cara Bergschneider 12-19-18	I would like to request an extension on the public comment period regarding the decision to conduct logging on ~4,000 acres in the Houston South portion of the Hoosier National Forest.	You will receive an invitation to an upcoming public meeting. Personnel will be on hand to address any questions you have.
50-1.2	Cara Bergschneider 12-19-18	I am a citizen and landowner of Monroe County, an advocate of well managed logging in our National Forests including forest openings to promote species diversity and richness, and a natural resource professional. I would like more discussion and information on the BMPs that will be used during the proposed logging project. I particularly would like to know:	<p>BMPs, design criteria, as well as Forest Plan standards and guidelines are part of the analysis and documented in the draft EA.</p> <p>The answers to you question can be found in the draft EA.</p>

		<ol style="list-style-type: none"> 1. Setback distances from creeks, 2. Location of forest openings (in term of distance from watercourses), 3. Number of stream crossings, 4. If there are requirements to clean machinery prior to entering the site to prevent the spread of invasive species (particularly Japanese stiltgrass on logging trails), 5. What is the management plan to control invasive species after logging has occurred and more sunlight reaches the forest floor? I see in the Forest Management Plan that invasive species are to be monitored but it is unclear to me on what action will be taken and when. 	
50-1.3	Cara Bergschneider 12-19-18	Extending the public comment period allows more time for education to occur. This information will help citizens understand the potential impacts of the logging project on Lake Monroe.	See Response #10
51-1	Gerald Long 12-20-18	I support this project as presented. The only deficiency of this project is that it was delayed t this extent. It should have been implemented a number of years ago to fulfill the 2006 Forest Plan	Thank you for your support.
51-1.2	Gerald Long 12-20-18	Lack of implementation has already caused environmental degradation (as documented in the Forest Plan, the activity plan and other regional analysis, e.g. USDA Forest Service forest analyses). Any further delay of the activity will result in further environmental degradation, specifically the lack of young forest (0-9 year age class), insufficient oak regeneration, and habitat loss for sensitive species dependent on young forest environment and/or oak-hickory forest.	Thank you for your comment.
51-1.3	Gerald Long 12-20-18	The project area is in landscape level proximity to large areas of mature/maturing forest without management (Wilderness area and adjacent areas) that lack young forest and age class diversity. This makes implementation of the project activity even more critical.	Thank you for your comment.

51-1.4	Gerald Long 12-20-18	Some have raised objections to the project based on a concern for water quality. I know the Forest Service follows Best Management Practices (BMP) to protect riparian areas and overall water quality. I also know the Forest Service has strict guidelines on herbicide use. I would appreciate a response to this letter with references to the BMP employed by the Forest Service and references that forest management activities with properly applied BMP do not add to erosion. This is for reference only and does not impact my opinion that the activity should be initiated and completed.	Thank you for your comment. Forest Plan Standards and Guidelines as well as Indiana BMPs are be part of the soil and water effects analysis in the draft EA.
51-1.5	Gerald Long 12-20-18	Failure to implement the proposed activity will result in overall environmental degradation and could justify an Appeal for lack of activity.	Comment noted.
52-1	Alice Sharp 12-20-18	As a resident living near the lake, I am opposed to the proposed logging because our drinking water is in harm's way, and as a kayaker, I want to protect our recreation area. I have observed the east end of the lake change over the last twenty years, filling in.	We do not expect this project to have negative effects to Lake Monroe. Potential effects were analyzed and documented in the draft EA.
52-1.2	Alice Sharp 12-20-18	I feel the comment period needs extended and we need to have public forums to allow myself and other residents to understand the impacts.	See Response #10
53-1	Paul Sharp 12-20-18	I am writing to express my opinion about the logging of the 4000 acres in the Hoosier national forest Lake Monroe watershed. As a resident of Monroe county that cares about our drinking water as well as our environment I am opposed to it.	Comment noted.
53-1.2	Paul Sharp 12-20-18	I also feel that the comment period needs to be extended and we need public forums to be held so that people concerned have a chance to discuss the issues.	See Response #10
54-1	Friends of Lake Monroe, (FOLM) Sherry Mitchell-Bruker, President 12-20-18	Friends of Lake Monroe contends that the risk this project poses for water quality degradation, combined with the importance of Lake Monroe as a drinking water supply, recreational feature and economic asset outweighs the need for oak-hickory forest in the Houston South area. Lake Monroe, officially known as Monroe Reservoir, provides drinking water for more than 120,000 people and hosts approximately one	Potential effects were analyzed and documented in the draft EA. <i>The Lake Monroe Diagnostic and Feasibility Study</i> states, "As with agricultural BMPs, there are adequate silviculture BMPs available for application in Lake Monroe's watershed, but many landowners must be educated on their proper use." It also states, "The implementation of agricultural, forestry, and urban BMPs

		million visitors per year. Lake Monroe also hosts numerous species of birds, fish and other wildlife.	<p>has been proven over the years to be very effective in reducing watershed erosion and runoff, and ultimately, in reducing the delivery of NPS pollutants to lakes” (Jones et al. 1997).</p> <p>Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs or water quality standards, Forest Plan standards take precedence.</p>
54-1.2	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Lack of detail in the proposed action, limited public input, and a disconnect with the 2006 Forest Plan indicate that the project as planned is not ready for analysis. Most of the project area contains highly erodible soils on slopes greater than 35%, which are not conducive to the proposed action. Project impacts, such as nutrient and sediment loading in the South Fork Salt Creek section of the Lake Monroe watershed, threaten the viability of Lake Monroe and the community that depends on it, including the City of Bloomington, Monroe County and Indiana University.	<p>See Response #10</p> <p>Potential effects are analyzed and documented in the draft EA.</p>
54-1.2	FOLM, Sherry Mitchell-Bruker, President 12-20-18	As “maintain and restore watershed health” is one of the eight goals for management of the Hoosier National Forest, FLM requests that this goal be given specific consideration in the Houston South project for Lake Monroe. Impacts to fish, wildlife, insects, soils, plants, air quality, water quality, and recreation must be adequately described and cumulative impacts must be considered. These impacts must be weighed against the precarious benefits of oak restoration and potentially temporary creation of early successional habitat. HNF must address the need to continuously manage the affected area in order to maintain early succession habitat or oak-hickory forest and analyze the cost and impacts of needed future actions.	Effects of issues generated from public scoping and effects relative to the Finding of No Significance Impact (FONSI) elements are analyzed and documented in the draft EA.
54-1.3	FOLM, Sherry Mitchell-Bruker,	More specifically, we provide below a list of the areas that HNF must address to respond to our concerns and to take account of our input in shaping the proposed	See Response 54-1.2

	12-20-18	projects and developing alternatives to the proposed project.	
54-1.4	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must demonstrate how this project and other HNF activities will produce the 81% mature hardwood forest projected and analyzed by the Forest Plan.</p> <p>The Forest plan projects a future with 81% of HNF in mature hardwoods (USDA FS 2006, p. B-2). The proposed project strives to provide early successional forest on 1,131 acres of land and to maintain more than 10,000 acres as oak-hickory forest, which would require periodic interventions to set back natural succession to Beech-Maple forest, precluding the eventual return to mature hardwood forest.</p> <p>HNF must weigh the need for maintaining oak-hickory forest in consideration of other past, current and proposed projects in the Brown County Hills ecoregion that meet the same needs, including Indiana State Forest vegetation management, The Nature Conservancy Brown County Hills Project, and implementation of The Nature Conservancy's Forest Bank Statewide Plan (TNC, 2009).</p>	<p>This information can be found in the Forest Plan Final EIS, page 3-99 (USDA FS 2006b).</p> <p>This project is consistent with and implements Forest Plan direction to maintain 4 to 12 percent of the area in young forest habitat.</p>
54-1.5	FOLM, Sherry Mitchell-Bruker, President 12-20-18	HNF must provide detailed information for the “many wildlife species” that rely on oak-hickory forest and demonstrate that the need for these species overshadows the need for species that rely on unfragmented, mature, closed-canopy forest.	This was analyzed in the Forest Plan Final EIS. See: Importance of Oak-Hickory Forests to Animal Species, Forest Plan EIS p. 3-81 and Alternatives and the Effects of Management on Animal Communities pages 3-92 to 3-165 (USDA FS 2006b).
54-1.6	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must provide detailed site-specific information on the “many songbirds” need for young forest habitat versus the fragmentation and disruption effects the project imposes on the existing songbird population.</p> <p>The National Audubon Society recognizes the Pleasant Run Unit of HNF as an Important Bird Area and cautions that “Studies conducted at the Pleasant Run Unit have shown that increased logging practices, including various timber-cutting regimes and the creation of wildlife openings, produce internal</p>	<p>See Response 54-1.5</p> <p>Vegetation management to improve forest structure and age class is not the same as fragmentation. Forest fragmentation is a process in which the landscape by which forest lands are broken up into smaller, isolated patches of forest surrounded by developed land uses such as urban development or agriculture. (Crocker et al, 2017).</p>

		<p>disturbances which eliminate habitat for forest dependent birds and lower reproductive success in forest adjacent to the disturbances. Many breeding neotropical birds, including numerous species of vireos, thrush, warblers, and tanagers, could all be negatively impacted.</p> <p>Additionally, management practices of both publicly and privately-owned properties adjacent to the Pleasant Run IBA can have negative impacts on forest-dependent birds. Many nearby state parks and recreation areas maintain short-grass landscapes, which is ideal habitat for Brown-headed Cowbirds, thus increasing the threat of parasitism in adjacent forested land.” (Ford et al, 2009; Audubon, 2013)</p>	<p>Habitat Fragmentation was analyzed in the Forest Plan Final EIS, p. 3-89 (USDA FS 2006b).</p> <p>Cowbird analysis can be found in the Forest Plan EIS pp. 3-90, 3-95, 3-98 (USDA FS 2006b).</p> <p>Birds on the Regional Foresters sensitive species were analyzed in a biological evaluation and documented in the draft EA.</p> <p>King and Schlossberg (2013) state, “The presence of agricultural and residential development within the landscape can negatively affect birds through nest predation and parasitism (Robinson et al., 1995); however these threats are not typical of extensively forested (~70%) landscapes (Hunter et al., 2001).</p> <p>The project area would remain forested, with a diversity of age class.</p>
54-1.7	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must thoroughly engage local government, environmental groups, and the public in a collaborative effort to explore and identify reasonable alternatives after project details are determined and before impact analysis is begun.</p> <p>The timeframe, content and notification for scoping is inadequate to engage the public and collaborate to explore and identify reasonable alternatives.</p> <p>The HNF website did not include the Houston South Project in the Schedule of Proposed Actions (SOPA) published on the HNF website (Appendix A). Although press releases and two social media posts included links to the scoping letter and map, most press coverage was a repetition of the euphemistic, nonspecific verbiage such as “treating vegetation” and “management activities” in the press release itself (Appendix A) with no mention of timber harvest,</p>	<p>A presentation was given at a public meeting in Bedford on September 6, 2018 discussing this proposal. Forest Supervisor, Michael Chaveas delivered another presentation on the proposal at the Monroe Co. public library on October 25, 2018, The scoping letter was posted on our website on November 26, 2018 and 200 hardcopy letters were mailed and over 80 emails were sent out with the scoping letter attached. Social media and press releases were sent to multiple papers.</p> <p>“Reasonable alternatives to the proposed action should fulfill the purpose and need and address unresolved conflicts related to the proposed action” (FSH 1909.15 – National Environmental Policy Act Handbook, Ch. 10)</p> <p>The statement that “The HNF website did not include the Houston South Project in the Schedule of Proposed Actions (SOPA) published on the HNF website (Appendix A)” is incorrect. The Schedule of Proposed Actions (SOPA) is published in January, April, July, and</p>

	<p>clearcutting, burning, or herbicide use. The social media posts were similar.</p> <p>Local officials in Monroe County and Bloomington were not aware of the scoping letter until Friends of Lake Monroe alerted them. No one in the City of Bloomington government was notified and Monroe County was notified by an email that was tagged as junk mail. Most scoping emails were sent to junk mail folders, due to method of dispersal. Once that information was conveyed to the District Ranger and deciding official, the Forest Service took no additional steps to inform local government or the public.</p> <p>HNF refused reasonable requests for extension of the scoping comment period, requested by Friends of Lake Monroe, major environmental organizations, the Monroe County Council, the Monroe County Commissioners, State Senator Mark Stoops, and others.</p> <p>The scoping letter gives insufficient detail for stakeholders to provide the “site specific and detailed comments” requested by HNF. In correspondence to both the Monroe County Council and Friends of Lake Monroe, it was stated that our request for an extension of scoping and the non-site specific and generalized concerns we provided are sufficient for scoping comments. This contradiction leads us to wonder if the Forest Service is paying adequate attention to their correspondence with the public and if the Forest Service is serious about including the public and local government in inviting their participation to identify issues and explore possible alternatives.</p> <p>According to the Council on Environmental Quality (ref), “Comments that are solution oriented and provide specific examples will be more effective than those that simply oppose the proposed project. Comments that contribute to developing alternatives that address the</p>	<p>October. The project was added to the Planning, Appeals & Litigation System (PALS), which generates the SOPA on 11-26-2018. This is verified by the time stamp in PALS. Thus, the next published SOPA in which the project would appear is January. Please remember to always click on <i>Click to view the current SOPA report</i> as opposed to <i>October 2018 through December 2018</i> to see the “live” version.</p> <p>Regarding extension of scoping period and scoping letter, see Response 14-1.</p>
--	---	---

		purpose and need for the action are also effective. <i>They are particularly helpful early in the NEPA process and should be made, if at all possible, during scoping, to ensure that reasonable alternatives can be analyzed and considered early in the process.</i>	
54-1.8	FOLM, Sherry Mitchell-Bruker, President 12-20-18	HNF must thoroughly quantify the carbon, nutrient, and sediment loading to the South Fork of Salt Creek and Lake Monroe that would occur as a result of the project activities. Include loadings that could occur during and after project implementation.	The draft EA discusses effects related to soil and water resources.
54-1.9	FOLM, Sherry Mitchell-Bruker, President 12-20-18	HNF must address new water quality concerns, namely harmful algae blooms and drinking water disinfectant by-products that were not considered in the 2006 Forest Management Plan.	<p>Studies referenced by the U.S. Geological Survey (USGS) found excessive nutrients, primarily nitrogen and phosphorus, can lead to eutrophication. The USGS's Spatially Referenced Regression on Watershed attributes (SPARROW) model identified corn/soybean row crop as the main contributor of total nitrogen loads, while phosphorus loads were linked to non-recoverable manure from pastures (Bunch 2016).</p> <p>The U.S. Army Corps of Engineers LRL Water Quality Program Management Plan states, "General contributing factors that promote the formation of HABs are: ample sunlight, warm temperatures, low-water or low-flow conditions, and excessive nutrients (nitrogen and phosphorus)."</p> <p>"Most nitrogen and phosphorus pollution (i.e., eutrophication) comes from the runoff of agricultural fertilizer, lawn fertilizer, untreated human sewage (storm overflows) and untreated animal sewage from concentrated animal feeding operations."</p> <p>Water quality concerns were addressed in the draft EA. Drinking water disinfectant by-products are beyond the scope of the Forest Plan and the Houston South project.</p>
54-1.10	FOLM, Sherry Mitchell-Bruker, President	If Best Management Practice implementation is used to indicate a load reduction, HNF must provide evidence from their BMP monitoring and evaluation reports of past forestry BMP implementation and effectiveness to support their conclusions.	Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs for water

	12-20-18		quality standards, Forest Plan standards take precedence.
54-1.11	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must evaluate the availability of professional foresters and scientists on the HNF staff to properly oversee implementation and include in their analysis site maps with detailed locations of roads and skid trails that are in accordance with State of Indiana BMPs and HNF standards and guidelines.</p> <p>We are concerned that the proposed project will increase nutrient and sediment loading to the most impaired part of the watershed. The following sections of the South Fork watershed are included on the state 303d list of impaired waters and do not or are not expected to meet state water quality standards. (<i>Listed in letter</i>)</p> <p>Additionally, there are other parts of the Lake Monroe watershed that are included on the 303d list of impaired waters: (<i>Listed in letter</i>)</p> <p>During recent years, hazardous algae blooms (HAB) in Lake Monroe have caused recreational advisories to be issued annually by the Indiana Department of Environmental Management (IDEM). In addition, disinfectant byproducts (DBPs) have increased at the City of Bloomington water treatment plant. Friends of Lake Monroe, working with City of Bloomington Utilities (CBU), The Nature Conservancy, and other soil and water resource scientists, including the HNF hydrologist, developed a list of priorities for the Lake Monroe watershed. These priorities include preventing algae blooms and minimizing nutrient inputs, total organic carbon and sediment delivery to the lake.</p> <p>Friends of Lake Monroe has been working to help landowners understand that the cumulative effects of small actions in the watershed have significant impacts to water quality in the lake. As the largest land manager in the watershed, the actions of HNF are especially significant, both in terms of potential impact and in</p>	<p>Effects related to soil and water resources were analyzed in the draft EA.</p> <p>Employees of the Hoosier National Forest are professionals and are dedicated to the conservation of our natural resources.</p> <p>See response 54-1.10.</p> <p>Trained timber sale contract administration personnel, including Forest Service Law Enforcement Officers, make regular inspections of harvesting operations. Based on the pace of operations from individual timber purchasers and on-the-ground resource protection needs, during active harvesting these inspections vary from daily, a few inspections a week, to weekly. The timber sale contract has a wide variety of provisions covering protection of National Forest resources such as payment for timber, BMP measures, fire precautions, and many more. It is the responsibility of the Forest Service contract administration team to make sure the terms of the contract are met by the timber purchaser so the land management objectives in the NEPA document(s) are achieved.</p>

		<p>relation to the messages sent to others who are being asked to take conservative measures to ensure the health of Lake Monroe and its watershed.</p> <p>Most of the proposed project is located on steep slopes with highly erodible soils (Nagel, 1990). According to the HNF Forest Management Plan, skid roads may not be located on slopes greater than 35% (USDA FS 2006 p 3-7). In addition, Indiana State BMPs instruct to avoid long steep grades greater than 20%, allowing skid trails on steeper grades only for short distances and when large water bars or other diversions are installed and maintained (IDNR 2005 Indiana Logging and Forestry Best Management Practices, IDNR Division of Forestry.</p> <p>Professional foresters are needed to oversee logging operations on a daily basis. The people administering the HNF timber sales should all be professional foresters with forestry degrees.</p>	
54-1.12	FOLM, Sherry Mitchell-Bruker, President 12-20-18	HNF must thoroughly examine impacts of herbicide use on water quality in the watershed. Herbicides commonly used in forestry projects are known to contaminate surface water, in spite of EPA label restrictions designed to keep this from occurring. See, for example, Douglas et al. 2016 and citations therein.”	Herbicide use was analyzed and effects disclosed in the draft EA.
54-1.13	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must assess risks to wildlife from herbicide use associated with this project using up-to-date scientific information from a variety of sources. For example, glyphosate-containing herbicide formulations have been shown to harm wildlife, in part because of surfactants and other formulation components (see, for example, studies by Relyea et al. 2011, on amphibians), but also from the active ingredient itself (see, [new study on bees and microflora], where glyphosate disrupts gut microflora of honey bees, with implications for other organisms).</p> <p>In many risk assessments of herbicides, honey bees are used as surrogates for other terrestrial insects. Recent studies increasingly show serious sublethal</p>	Herbicide use was analyzed and effects disclosed in the draft EA.

		impacts of herbicides to honey bees from both full formulations and active ingredients, with implications for other insects. Studies involving negative impacts of glyphosate-based herbicides on honey bees include: <i>(Links to studies provided in letter)</i>	
54-1.14	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must conduct a site-specific analysis of the impacts of herbicide use.</p> <p>Rangeland managers using herbicides to control perennial weeds and invasive plants may understand that persistent herbicide residues can affect subsequently seeded species. It may not be as commonly known, though, that environmental and soil properties largely determine soil residue persistence. As a consequence, herbicides applied over a large area may vary spatially in their degradation rates. Small differences between adjacent soil types in texture and organic matter content, along with other properties, may result in the same plant species having variable sensitivities to the same herbicide across a large treated area. (Douglas et al, 2016)</p>	Herbicide use was analyzed and effects disclosed in the draft EA.
54-1.15	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must consider the impacts of accidental damage to desired native vegetation from herbicide application.</p> <p>Clatterbuck and Armel (2010) state that direct spray can harm adjacent desirable species through poor directional spraying, volatilization, drift from wind, drip from overspraying target plants, and poor timing. Timing of application is at full leaf emergence in the summer through the growing season when leaves begin to senesce near the end of the growing season (early September), reducing the effectiveness of the foliar spray. The general recommendation is not to use direct foliar spraying because of the chance of affecting desirable plants.</p> <p>Directed sprays can influence non-target broad-leaf plants even with the best application procedures. The choice of herbicide will depend on the target species or the spectrum of target species, because many of the</p>	<p>Herbicide use for stand improvement activities usually requires a single application to attain the desired effects. Herbicide would be applied specifically to a stump or a cut on the trunk of targeted woody vegetation resulting in a relatively small area of application with little to no herbicide contacting the soil. It is not a broadcast spray operation where everything is covered by the chemical.</p> <p>Herbicide use was analyzed and effects disclosed in the EA.</p>

		<p>herbicides have different impacts on various species. This technique has more application in the release of conifers when the hardwood competition is less than 6 feet tall, not in the site preparation for hardwood regeneration unless the species controlled are small (less than 3 feet tall) and accessible with a backpack sprayer.</p> <p>According to Clark et al (2018), three forest stands managed by the Southern Region of the USDA Forest Service were selected as study locations, which are hereafter referenced by their USA postal code abbreviations for their corresponding state (NC, TN, or VA). A commercial shelterwood-with-reserve regeneration harvest that left a residual basal area of 2.3–4.6 m² ha⁻¹ of overstory trees (trees greater than 14 cm in diameter at breast height) was implemented just prior to planting on each site. Stump sprouts of all species excluding oak, hickory (<i>Carya Nutt.</i>), cherry (<i>Prunus L.</i>) or native chestnut were treated with herbicide (triclopyr) to control stump sprout competition at the time of planting, and competitors were again treated using a basal bark herbicide release (triclopyr) in the early growing season of year 5. Accidental herbicide damage occurred at the VA planting that affected approximately 40 percent of trees in year 5. Damage included primarily stunted growth, and possibly death in two cases. No herbicide damage was detected at the NC or TN locations. Seedlings were planted on a 2.5 m by 2.5 m spacing in February or March 2009.</p>	
54-1.16	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must reconcile the purpose and need and proposed actions with the Forest Plan, including the language within the Record of Decision where it is clearly stated that:</p> <ul style="list-style-type: none"> • The 2006 Forest Plan intention is to move HNF towards mostly mature, closed canopy forest. • Portions of the 2.8 general forest management area were converted to 3.3 management areas for the purpose of providing early successional habitat, 	The Forest Plan states, “The desired condition of this area is to maintain 4 to 12 percent of the area in young forest habitat and up to an additional 3 percent as openings. The Forest manages the area primarily for plant and animal habitat diversity and timber harvest is an appropriate tool for use in this area” (Forest Plan 3-28). If 4 to 12 percent is young forest with an additional 3 percent as permanent openings, 85 to 92 percent would be moving to late successional forest.

	<p>which indicates that early successional habitat conversion is not intended for management area 2.8.</p> <p>There is no mandate for the proposed actions in the Forest Plan and in fact, the proposed actions are contrary to the goals of the plan. On page 2 of the scoping letter, there is reference to (USDA FS 2006, p. B9), which is an appendix to the plan, outlining, in general, the USFS Eastern Region silvicultural systems and regeneration harvest methods. It does not reflect the intention or the direction for management of the 2.8 management area towards oak-hickory forest, but generally outlines appropriate harvest methods to retain oak-hickory or early successional forest.</p> <p>According to the Record of Decision (ROD) the 2006 Forest Plan envisions a forest where “most of the Forest will continue to move toward mature, closed canopy forest conditions and provide late successional and forest-interior habitat.” (USDA-ROD, p. 8). The analysis in the Forest Plan Environmental Impact Statement (EIS) projected mature hardwood forest in 81% of HNF (USDA p. B-2).</p> <p>The ROD further states “Management Area (MA) 3.3 was created in response to the results of our species viability evaluation (SVE). We identified that there was a high risk that viable populations of early successional species could not be maintained unless some part of the Hoosier National Forest was managed with an emphasis on providing habitat for early-successional species. Management Area 3.3 was created from lands that were previously MA 2.8 (General Forest Lands, and was designed to emphasize diversity for wildlife species requiring a mix of early and late successional vegetative types and age classes. It will better provide habitat requirements for a suite of wildlife species represented in the species viability evaluation by American woodcock, ruffed grouse, and yellow-breasted chat.”</p>	<p>The Forest Plan Final EIS states: “Management Area 2.8 Desired Condition This management area provides a mix of habitats and increased biodiversity. This management area provides a continuous canopy with scattered openings. It is associated with a variety of forest plant communities and has a high degree of vertical and horizontal vegetative diversity” (USDA FS 2006b).</p> <p>For Desired Conditions of Management Area 2.8. the Forest Plan states, “This area provides a variety of forest types, reflecting different ecological sites and management activities. Openings in the canopy result in different canopy levels and animal communities associated with vertically diverse, shade-tolerant vegetation, as well as different successional stages of vegetation. There is a higher percentage of edge habitat in this management area than in most of the forest. Site-specific decisions result in many variations within this management area (USDA FS 2006a p.3-28).</p> <p>Forest Plan Guidance for MA 2.8 includes (USDA FS 2006, pages 3-28 to 3-29):</p> <ul style="list-style-type: none"> • Limit temporary opening size in a group selection harvest to no larger than 3 acres. • Limit temporary openings created by clearcut and shelterwood harvests to 10 acres. • Provide a variety of opening sizes in character with the landscape. • Blend openings created by harvest with the surrounding area. Distribute openings across the landscape to provide for biological diversity as well as visual and site considerations. • As needed, treat stand understories prior to harvest to promote advanced regeneration of desired plant species. • Consider crop tree release in young hardwood stands to promote oak survival, earlier mast
--	---	--

		<p>The proposed project is within the 2.8 management area, which calls for mostly mature trees with small openings (4-12% openings). According to the Forest Plan, the 2.8 area is “general forest with large areas of old forests and scattered openings associated with a variety of forest plant communities. A variety of tree species is present, but shade tolerant species may dominate some forest communities over time.</p> <p>In the 150-year timeframe envisioned, these openings would naturally occur due to the death of mature trees. According to the Forest Plan, bottomland areas of Management Area 2.8 are identified as not appropriate for timber production (USDA p. B-16) and skid roads are not permitted on slopes greater than 35% (USDA p. B-7), which eliminates most of the proposed project.</p>	<p>production, forage production, and additional growth on desirable species.</p> <p>The Proposed Action is not contrary to the goals of the Forest Plan.</p>
54-1.17	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must fully consider the likelihood of invasive plant introduction from off-road equipment, and removal of vegetation and consider the water quality, economic, and ecological costs of herbicide use in mitigation measures.</p>	<p>Spread of non-native invasive plant species was analyzed as an issue in the draft EA. The use of herbicides to treat nonnative invasive plants was analyzed in the Nonnative Invasive Plant Control Program Analysis EA. The use of herbicides for silvicultural practices was analyzed and effects disclosed in the draft EA.</p>
54-1.18	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must consider the effects of ecosystem function resulting from the loss of herbaceous layer due to fire and herbicide use.</p> <p>The USFS “has identified invasive species as one of the four critical threats to our Forests and Grasslands”.</p> <p>The movement of off-road equipment into and out of the forest is a high-risk pathway and will introduce invasive plant species, both those endemic to the area and those which are not yet problematic. One of the major negative results of creating forest openings is that “disturbed areas are most susceptible to rapid invasion and dominance.</p>	<p>Use of prescribed fire, NNIS spreads, and herbicide use was analyzed and effects disclosed in the draft EA.</p> <p>See Response 8-1.3</p>

54-1.19	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must compare the effects of removing non-native pines to the effects of allowing the pines to be naturally replaced by the native hardwood community.</p> <p>Pines were planted to aid in erosion control and still serve that purpose. While we would not advocate planting non-native species, as the USDA has advocated in the past, the remnant pine plantations provide unique habitat and species diversity. As stated in the (USDA ROD p. 3), "The pines stands are now a mix of the nonnative pines and native hardwood species, with many of the pines dying." Eventually, native hardwoods will outcompete pines and the soil that has developed will be retained.</p>	Those effects have been analyzed in the Forest Plan Final EIS, pp. 3-82 to 3-83; 3-104 to 3-105 (USDA FS 2006b).
54-1.20	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must consider the effect of deer browsing, presence of oak and hickory seedlings, light competition, and the cost of controlling competing vegetation in the sustainability of the oak-hickory forest that they seek to create. The long-term benefits derived from short-term disruption can only be expected under a sustained desired condition.</p> <p>After the logging, burning and herbicide removal of non-desired plant species takes place, the proposed plan anticipates oak and hickory regeneration to occur without planting or providing protection from devastation by wildlife.</p> <p>A comprehensive study in Pennsylvania (Jackson et al, 2017) found that 47 percent of timber harvests were unsustainable due to deer browse, competing vegetation and light changes. In areas with high deer impact, adequate advanced regeneration is difficult to achieve. It is often necessary to have at least one desirable seedling per square foot, 40,000 desirable seedlings per acre or more. Deer can reduce tree seedling numbers, seed availability, species composition, and seedling height, preferring oak, maple, ash, and yellow poplar over species such as beech, birch, and cherry. Given the large numbers of</p>	This concern has been addressed in the Forest Plan Final EIS, pp. 3-103 to 3-104 (USDA FS 2006b).

		<p>deer in south central Indiana, the success of this project in regenerating oaks trees in these areas may be highly uncertain.</p> <p>Jackson warns that clearcutting should be practiced only where adequate forest regeneration is already present on the forest floor and the next forest is already in place and simply needs more light. However, increased light will cause competing and invasive plants to flourish and desirable species may be more easily harmed by herbicide treatments. Remnant logging slash can impede access needed to control competing vegetation. Treating competing vegetation, managing deer impacts, and meticulously controlling light can be costly. The ability of HNF to bear the costs of this ongoing effort should be considered in relation to the existing backlog of areas that require maintenance or removal of invasive plants.</p>	<p>Funding is dependent on congressional budget allocations. The Forest Service is committed to planning within those allocations for the necessary completion of Forest management.</p>
54-1.21	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must analyze and quantify the effects of fuels created through timber harvest, recognizing that without the proposed action, these fuels would not exist. This analysis should include the anticipated volume of fuels created, the method of handling fuels after harvest and before burning, the timing of burning and the effect of burning on water quality, wildlife and local air quality. The effect of burning fuels created by timber harvest should be considered separately from the effect of burning in areas without timber harvest.</p>	<p>Impacts of prescribed burning was analyzed in the draft EA.</p>
54-1.22	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must analyze the effects of prescribed burns in terms of water quality, air quality, soil loss, leaf litter loss, herbaceous layer loss, wildlife effects, invasive plant introduction, soil acidification, nutrient runoff, greenhouse gas release, and carbon release. Pulse effects and longer-term effects should both be considered.</p> <p>The negative effects of prescribed burning must be evaluated particular to the location of the project area and surrounding conditions. This is difficult for the Hoosier National Forest since studies of effects pertain</p>	<p>Impacts of prescribed burning was analyzed in the draft EA.</p>

		<p>to other regions, and other types of forests, which have a fire-dependent ecosystem, a high risk of catastrophic fire and a long history of using this method of forest management. Nonetheless, some of the downsides of prescribed burning come from other regions are applicable. Negative effects that should be evaluated include the following.</p> <p>Smoke as a public health concern (https://www.ncbi.nlm.nih.gov/pubmed/25947317);</p> <p>Increased carbon in the atmosphere (http://coweeta.uga.edu/publications/329.pdf);</p> <p>Volatilization of nitrogen and sulfur, which is particularly significant regarding the watershed of Lake Monroe and as measured against the present range of N levels (https://www.srs.fs.usda.gov/sustain/report/fire/fire-17.htm);</p> <p>Loss of site nutrients, particularly nitrogen, and decrease in soil moisture as a result of removing the mulch on the forest floor, and how these altered conditions relate to soil health and the goal of growing the desired species (https://www.sciencedaily.com/releases/2018/09/180910160632.htm);</p> <p>Actual death of some animals as well as loss of habitat for others (http://wildlife.org/wp-content/uploads/2014/05/TechManual16-01FINAL.pdf).</p> <p>Assessment of pros and cons of prescribed burning for the type of forest at Houston South should reference evaluations made for comparable forests.</p>	
54-1.23	FOLM, Sherry Mitchell-	HNF must consider the impact of the proposed action on all resident and migrant bird populations in the project area and adjacent areas based on recent data.	A memorandum of understanding between the USDA Forest Service and US Fish and Wildlife Service was created to promote the conservation of migratory birds.

	<p>Bruker, President 12-20-18</p>	<p>Given critical declines in neotropical migrant populations, tiering to the 2006 analysis in the Forest Plan EIS is not sufficient. Fragmentation effects must be considered in relation to Cowbird parasitism and the impact of short-term detrimental effects on declining populations from multiple periods of disruption, including effect of herbicides on insect food base, increased deer browsing and loss of understory and herbaceous plants should be considered.</p>	<p>In the MOU, both Parties “mutually agree that it is important to: 1) focus on bird populations; 2) focus on habitat restoration and enhancement where actions can benefit specific ecosystems and migratory birds dependent upon them; 3) recognize that actions taken to benefit some migratory bird populations may adversely affect other migratory bird populations; and 4) recognize that actions that may provide long-term benefits to migratory birds may have short-term impacts on individual birds.” (FS Agreement # 08-MU-1113-2400-264)</p> <p>The Hoosier National Forest operates under the 2006 Forest Plan, which is tiered to the Forest Plan EIS, which is valid until revised. There are no plans for a revision.</p> <p>See Response and 54-1.6 54-1.18</p>										
54-1.24	<p>FOLM, Sherry Mitchell-Bruker, President 12-20-18</p>	<p>HNF must consider the unique habitat provided by non-native pine forest to migratory and non-migratory birds such as various warblers, barred owls, screech owls, golden and ruby crowned kinglets, and others.</p>	<p>See Response 54-1.19</p>										
54-1.25	<p>FOLM, Sherry Mitchell-Bruker, President 12-20-18</p>	<p>HNF must consider the economic impact of the project, in terms of the profit and cost of implementing the project, the cost of implementing mitigation and continuing mitigation in the future, the cost of maintaining the project benefits over time and the impact on the local economy particularly in terms of road repairs, recreational activities and water treatment costs. Given the projected limits on the HNF budget, consider the work that may not be accomplished in order to maintain the benefits of the proposed action.</p>	<p>An economic analysis was conducted using QuickSilver version 2.8.</p> <table><tr><td>Description</td><td>Action Alternative</td></tr><tr><td>Present Value (cost)</td><td>-\$3,273,844.37</td></tr><tr><td>Present Value (benefit)</td><td>\$5,873,356.82</td></tr><tr><td>Present Net Value</td><td>\$2,599,512.45</td></tr><tr><td>Benefit Cost Ratio</td><td>1.79</td></tr></table> <p>The complete report is located in the Project Record.</p> <p>The Jackson and Lawrence County Commissioners have voiced no concerns with the project; thus, maintenance of county roads is not an issue.</p> <p>Impacts to recreation was analyzed in the draft EA.</p>	Description	Action Alternative	Present Value (cost)	-\$3,273,844.37	Present Value (benefit)	\$5,873,356.82	Present Net Value	\$2,599,512.45	Benefit Cost Ratio	1.79
Description	Action Alternative												
Present Value (cost)	-\$3,273,844.37												
Present Value (benefit)	\$5,873,356.82												
Present Net Value	\$2,599,512.45												
Benefit Cost Ratio	1.79												

			<p>The cost of treating water is outside the scope of the analysis because negative effects to Lake Monroe are not expected.</p> <p>Funding is dependent on congressional budget allocations. The Forest Service is committed to planning within those allocations for the necessary completion of Forest undertakings.</p>
54-1.26	FOLM, Sherry Mitchell-Bruker, President 12-20-18	<p>HNF must consider the effects of climate change, in terms of the impact of the project on greenhouse gases and carbon release and the effects of projected climate change on the project outcomes and the future without project.</p> <p>According to the Indiana Climate Change Impacts Assessment, (2018 Purdue University <http://ag.purdue.edu>), “Heavy precipitation events are expected to intensify as temperatures rise throughout this century. Regional observations of heavy precipitation in the midwestern U.S. also show that not only are extreme events happening more frequently, but that higher rainfall totals are being measured within these events.” Averaged across the Midwest, there has been a 42 percent increase in the amount of precipitation falling in the top 1 percent of events from 1958-2016 (USGRP, 2017). Heavy downpours increase the likelihood of more erosion, especially in disrupted soils, leading to more nutrients, sediments, and herbicides entering waters leading into Lake Monroe.</p> <p>Additionally, the report states that more frequent and prolonged drought is expected in the region and the future without project may support less mesic vegetation than what was anticipated in the 2006 Forest Plan EIS.</p>	Climate change was addressed in the draft EA.
54-1.27	FOLM, Sherry Mitchell-	HNF must seek revenue other than timber sales to repair poorly maintained roads.	Comment noted.

	Bruker, President 12-20-18		
54-1.28	FOLM, Sherry Mitchell- Bruker, President 12-20-18	HNF must consider the effects of road construction on soils, water quality, invasive species, and cowbird parasitism	See Response 54-1.6, 54-1.8, 54-1.17
54-1.29	FOLM, Sherry Mitchell- Bruker, President 12-20-18	<p>HNF must consider the impact of logging operations on public safety and on non-forest service road maintenance.</p> <p>Road building is another disruptive component of today's logging practices. Roads that are sufficiently wide to accommodate heavy equipment and logging trucks damage interior forest tracts by providing edges and pathways for non-native species to invade forest interiors. One example of this edge effect is the brown headed cowbird that is almost ubiquitous throughout Indiana but prefers to parasitize nests along forest edges. Logging trucks are exempt from normal weight limits for roadways, and there is the risk of damage to county roads as a result. While counties receive a share (15% of net logging revenues), these funds are not sufficient to cover road repairs, and earmarked for other purposes anyway.</p>	<p>Safety of Forest visitors is of utmost importance. Project design criteria would ensure public safety.</p> <p>Neither the Jackson County Commissioners nor the Lawrence County Commissioners had issues with the proposed action.</p>
54-1.30	FOLM, Sherry Mitchell- Bruker, President 12-20-18	HNF must consider the cumulative effects of past (since 2006), current and future development in the project area and the creation of edge habitat in developed areas.	Cumulative impacts was analyzed per 40 CFR 1508.7.
54-1.31	FOLM, Sherry Mitchell- Bruker, President 12-20-18	Managing public forests for multiple public values is almost never an entirely passive undertaking. Management is more commonly on a continuum from nearly passive to intensively active depending on the desired outcomes. It is the balancing of outcomes, including financial returns and the actions necessary to	Forest Service NEPA regulations (36 C.F.R. 220.7 (b)) state: "The Environmental Assessment (EA) shall briefly describe the proposed action and alternative(s) that meet the need for action. No specific number of alternatives is required or prescribed."

		<p>achieve these outcomes that is the crux of decision-making.</p> <p>The biggest challenge is when the actions for a particular outcome have a potential negative effect on other outcomes. Resolution may sometimes be the “do nothing” alternative, but that too may bring cumulative negative effects. Alternatively, resolution may come from changing the location of the management area to achieve as many desired outcomes as possible while also eliminating risk of those that would be negative.</p> <p>Therefore, providing only two alternatives for the management goals listed for the Houston South area -- “carry out the project” and “do nothing” – eliminates the possibility of balancing outcomes and discovery of the best suited locale. This is why NEPA calls for evaluation of alternatives. Further, the “do nothing” alternative ensures that the management goals are not met, which favors the “carry out” alternative.</p>	<p>1909.15, Chapter 10, Section 14 provides additional guidance for developing alternatives, and stresses that “Reasonable alternatives to the proposed action should fulfill the purpose and need and address unresolved conflicts related to the proposed action.”</p> <p>Public comments did not drive an additional alternative.</p>
54-1.32	FOLM, Sherry Mitchell-Bruker, President 12-20-18	An additional management goal, and associated passive or active management plans, should be explicit in a forest restoration project: maintain or enhance water-quality for aquatic plants and animals as well as for human use.	Maintain and Restore Watershed Health is Forest-wide guidance (USDA FS 2006a, pp. 3-13 to 3-16)
54-1.33	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Other forest areas in the Brownstown District, and specifically those that are outside the Lake Monroe watershed, should be evaluated as alternatives to the Houston South area for all management goals, with the evaluation to include effects on the human health and economics.	The Houston South project area was determined because the area is overly dense, lacking young forest, and is losing the oak-hickory component as stands age. Other areas in the Brownstown Ranger District may be considered in the future, but not as an alternative.
54-1.34	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Alternatives should be developed that eliminate the use of herbicides, eliminate timber removal on slopes greater than 35%, eliminate harvest of timber removal in bottomlands, eliminate timber removal within 100 ft of ephemeral, intermittent, and perennial streams, repair or remove poorly maintained roads, improve aquatic passage and eliminate impacts on recreation.	<p>Forest Service Handbook (FSH) 1909.15, Chapter 10, Section 14 provides additional guidance for developing alternatives, and stresses that “Reasonable alternatives to the proposed action should fulfill the purpose and need and address unresolved conflicts related to the proposed action.”</p> <p>Issues were analyzed and disclosed in the draft EA.</p>

			The Houston South project will follow all Forest Plan standards and guidelines.
54-1.35	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Provide public and local government with timely and adequate notification of opportunities for comment and collaboration. These notifications must be disseminated in a manner that is less likely to be intercepted as spam and HNF must follow up to ensure these notifications have been received.	The Forest will follow regulations found at 36 CFR 218.24: Notification of opportunity to comment on proposed projects and activities.
54-1.36	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Provide data and relevant documents or links to data and documents, including GIS layers on a single public website as was done in the following example https://www.fs.usda.gov/project/?project=52276 .	Requests for spatial data can be made by contacting our office.
54-1.37	FOLM, Sherry Mitchell-Bruker, President 12-20-18	Before HNF finalizes alternatives and begins analysis HNF must conduct workshops with the public and forest service specialists to understand the proposed project and formulate potential alternatives.	See Response #10.
54-1.38	FOLM, Sherry Mitchell-Bruker, President 12-20-18	After HNF finalizes alternatives and completes analysis HNF must conduct workshops presenting alternatives and analysis, allowing for public input and modification of preferred project.	See Response #10.
55-1	Denise Arn 12-20-18	My husband and I live in Bloomington, Indiana. Lake Monroe is the sole source of drinking water for Bloomington and the surrounding area. Accordingly, it is imperative that the lake be protected—at all cost—from pollution of any kind, whether it be sediment from soil erosion caused by logging of trees, or even worse, toxic chemicals such as herbicides.	We do not expect this project to have negative effects to Lake Monroe. Effects to soil and water resources and herbicide use are included in the Draft EA.
55-1.2	Denise Arn 12-20-18	It appears that this proposed project involves part of the Lake Monroe watershed, and that eventual, if not immediate, pollution of the waters of Lake Monroe is extremely likely. This is unacceptable. This project must be the brain-child of someone who does not live near Lake Monroe and as a result, does not care if the quality of our drinking water is degraded and our health	The proposed project occurs in the South Fork Salt Creek Watershed. See Response 55-1

		put at risk. In the last couple of years, discharges from motor boats using Lake Monroe for recreation have already presented challenges for Bloomington's water purification system. What we don't need is an additional challenge from soil erosion and its consequences or an additional threat from toxic chemicals such as herbicides leaching into the lake. If this project is allowed to proceed as planned, it will threaten the health and lives of the citizens of this area and the wildlife who use the water from Lake Monroe.	
55-1.3	Denise Arn 12-20-18	Especially concerning is the proposed use of herbicides. After all, these toxic chemicals are designed to kill plants; there is no guarantee that they are not also toxic to humans and animals, especially where their use is widespread as it would be here. The thought of herbicides ending up in our water supply is absolutely frightening. All one has to do is remember the carcinogenic, deadly weed-killer "Round-up," which has been in the news recently.	See Response 55-1
55-1.4	Denise Arn 12-20-18	As well-intentioned as this plan may be, it is not worth the risk of harm to the water quality of Lake Monroe and the health of those who have no choice but to rely upon it for our drinking water. I therefore urge the Forest Service to abandon this project.	See Response 55-1
55-2	Denise Arn 12-21-18	I live in Bloomington, IN. The above-referenced project appears to have the very real potential to adversely impact Lake Monroe, the sole source of drinking water for Bloomington and the surrounding area. I understand that while preliminary plans for this project were initially presented and an overview was later given by the project supervisor at a second meeting, neither presentation provided project details. The overview apparently included an emphasis on general management strategies, but there were no details specific enough to answer the most basic questions that would logically arise from the proposal. The bottom line is that to date, the citizens who are going to be impacted by this project still do not have sufficient specific information to fully understand how the project will impact them, the lake, and their drinking water.	Negative effects to Lake Monroe are not expected. When the draft EA is completed, a 30-day comment period will follow. Additionally, public meetings will occur.

		This, in turn, makes it difficult, if not impossible, for affected citizens to submit fully-informed comments.	
55-2.2	Denise Arn 12-21-18	The comment period ends December 26, 2018. I note that the 30-day comment period falls right during the holiday season, when many people are either out-of-town, preoccupied with preparations for the holidays, or fully engaged in bringing the school semesters to a close. Given both the lack of specificity by Hoosier National Forest staff in their presentations and the timing of the comment period, fairness dictates that the comment period be extended for a reasonable time. I understand that numerous citizens submitted requests for an extension of the public comment period; however, Hoosier National Forest has rejected their requests. Needless to say, this doesn't look good. It looks like limited information was put out about a project that could have serious, possibly dangerous, implications for citizens and wildlife who use Lake Monroe; the timing of the comment period was/is least advantageous to the public who will be affected by the project; and responsible forest personnel appear intent on forging ahead with the project without providing adequate information to the public about it and then affording a reasonable amount of time for comment.	The comment period referred to by the commenter was the scoping period. The 30-day notice and comment period is expected summer 2019. See Response #10.
55-2.3	Denise Arn 12-21-18	A letter to the editor of our local Bloomington newspaper provided your name and email address as the point of contact for this matter and suggested that concerned citizens contact you to ask that you announce an extended comment period, including public forums for the Houston South project. That is why I am writing you and that is what I am asking you to do. Please help us.	See Response #10
56	Tracy Whelan 12-20-18	I am writing to ask that you extend the comment period for the Houston South logging project. This project could have major impacts on the Lake Monroe watershed, the water source for my family and community. I think it is important that the voices of those likely to be affected are heard before final decisions are made.	See Response #10

56-1	Madeline Hirschland 12-20-18	I write to ask that the public comment period for the 4000-acre Houston South logging project in the Lake Monroe watershed be extended beyond the current Dec. 26 2018 deadline and that at least two public forums be scheduled during the extended period. As this project will affect wildlife and water quality for Monroe County's main source of drinking water, it should receive a full public vetting which it has not to date.	See Response #10
56-1.2	Madeline Hirschland 12-20-18	The plans presented to the public to date have been insufficiently detailed for the public to assess the project's impact. The plans presented at the September meeting were described as "preliminary" and the October description also remained general. The November 26 Scoping Letter did not include specifics that the public could respond to and also introduced new information not presented at the meetings in September and October.	See Response #10
56-1.3	Madeline Hirschland 12-20-18	I ask Hoosier National Forest, as a partner in good faith with the local community, to extend the comment period and schedule at least two additional public forums to discuss the project in full detail.	See Response #10
57	Gillian Harris 12-20-18	As a resident of Monroe County and a frequent visitor to Lake Monroe, the Hoosier National Forest and other adjacent areas, I'm asking you to extend the comment and citizen input timeframe regarding logging/burning and other forestry activities in these areas. I'm concerned that we don't know the extent of the impact on our water resources of the proposed activities--it seems as though more clarification is needed on exactly what is planned and precisely how it will effect our water and forest.	See Response #10
58	Joan Middendorf 12-20-18	Please announce an extended comment period including public forums for Houston South.	See Response #10
59	Christine Linnemeier 12-21-18	Please announce an extended comment period including public forums for the Houston South project. With the business of the holidays, many people have not had time to learn more and comment.	See Response #10

60-1	Dave Simcox 12-21-18	<p>I am sending you a copy of my letter published in the Bloomington Herald Times yesterday, December 20, 2018.</p> <p>My hope is that you will re-examine your weighting of the short term advantages (expediency, by-the-book, deadlines) vs the long term advantages (community relations, goodwill) of this Scoping Letter comment period and its public forums.</p>	Comment noted.
60-2	Dave Simcox 12-26-18	As you and your staff at the Hoosier National Forest (HNF) evaluate comments from myself and others, please consider one of your primary roles is as stewards of the Monroe Reservoir (Lake Monroe) Watershed as described in your HNF management goals (1) which states "maintain and restore watershed health". See Attachment No 1 for a map.	Comment noted.
60-2.2	Dave Simcox 12-26-18	Your November 26, 2018 Scoping Letter does not provide the level of detail required to provide many "specific written comments", but I have attempted to do so where possible. Some of my comments are general in nature which you have said is acceptable in your response to a previous comment letter from others.	Comment noted.
60-2.3	Dave Simcox 12-26-18	As I have said previously, it is unfortunate you are providing the public with such a narrow and untimely window of opportunity to comment. I reserve the right to send additional comments in the near term, as you also said is acceptable. Of additional concern is your release of the required HNF Biennial Report for FY 2016 and FY 2017 (2) in the final days of this comment period.	<p>Comment noted.</p> <p>The date the report was due, per Regional Office instruction, was December 31, 2018. The report date was independent of any proposed project.</p>
60-2.4	Dave Simcox 12-26-18	It bears repeating that an important role HNF plays is to be a partner in sustaining Lake Monroe, the sole source of drinking water for 120,000+ of your fellow citizens. HNF should also recognize its role in helping to attract a million or more visitors a year to Lake Monroe and how important this resource is to the vitality of our joint community. Lake Monroe is an economic engine that helps drive small and large business in our area, as well as providing revenue for HNF.	Comment noted.

60-2.5	Dave Simcox 12-26-18	<p>Can Hoosier National Forest (HNF) improve its contribution to Lake Monroe's sustainability?</p> <p>Currently Lake Monroe is experiencing loading of nutrients and sediment from runoff in its 423 square mile watershed. It is phosphorus limited so any contributions of soil and nutrient runoff will contribute to further algae buildup in the lake.</p> <p>HNF represents roughly 20% of the acreage in the Lake Monroe watershed. In order to increase Lake Monroe's sustainability, HNF's duty along with all landowners and managers in the watershed is to strive to reduce their contribution of nutrients and sediment to Lake Monroe.</p> <p>Our state and national forests provide protection against soil losses through erosion and sediment runoff. When soils are disturbed via logging, road building or other human activities, soil is inevitably dislocated.</p> <p>In arguing for the importance of adhering to Best Management Practices (BMP's) in managing soil erosion, Indiana's Department of Natural Resources (IDNR) in a recent paper (3) on logging in the Lake Monroe watershed in fact highlight problems and reliance upon this tool to manage soil losses from forest activities:</p> <ol style="list-style-type: none"> 1. The paper recognizes that soil losses do occur during logging practices (Page 9), 2. That BMP' s are not practiced on public lands 100% of the time (Page 5) and 3. BMP's, when practiced, are not completely effective at removing nutrients/sediment runoff (Page 3). <p>Therefore one has to conclude that logging in the HS Project would introduce risks of contaminating Lake Monroe via sediment and nutrient runoff.</p>	<p>We do not expect this project to have negative effects to Lake Monroe.</p> <p>Effects to soil and water resources are included in the Draft EA.</p> <p>The <i>Lake Monroe Diagnostic and Feasibility Study</i> states, "As with agricultural BMPs, there are adequate silviculture BMPs available for application in Lake Monroe's watershed, but many landowners must be educated on their proper use." It also states, "The implementation of agricultural, forestry, and urban BMPs has been proven over the years to be very effective in reducing watershed erosion and runoff, and ultimately, in reducing the delivery of NPS pollutants to lakes" (Jones et al. 1997).</p> <p>Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs or water quality standards, Forest Plan standards take precedence.</p>
--------	-------------------------	--	---

		<p>The IDNR paper fails to mention that the timing of monitoring of logging operations and taking corrective action is critical. If corrective action is taken following a heavy rainfall event, then the BMP process fails. Monitoring a logging site for BMP compliance requires sufficient trained manpower to be available to constantly evaluate compliance and take immediate corrective action as logging operations proceed.</p> <p>Regarding HNF practices in FY 2016 and FY 2017 as just reported (2):</p> <p>1. How well does HNF practice BMP's? <i>BMP's on five of the 13 projects cited were not "Fully" implemented. Only seven of the projects obtained an "Excellent" rating (Page 48).</i></p> <p>2. Does HNF conduct BMP's on a timely basis to prevent soil runoff? <i>HNF did not report on the timeliness of its BMP monitoring and corrective activities.</i></p> <p>3. Does HNF have the historical data to prove their logging/burning practices contribute zero nutrients and sediment to the South Fork of Salt Creek or in other cases with similar soil types and terrain? <i>No data related to actual historical projects and baseline monitoring in the Houston South was provided in the latest Biennial Report (2) Page 33.</i></p> <p>4. Does HNF have the qualified manpower to conduct continuous monitoring of logging and land clearing operations in the HS Project? <i>HNF management has admitted the lack of timely follow up with the Buffalo Pike operation conducted in 2014. The Buffalo Pike Project is a fraction of the size the HS Project. With 4000 acres of logging and up to 12,000 acres of burning proposed in the HS Project, even spread over 10 years, this amounts to 400-1200</i></p>	
--	--	--	--

		<p><i>acres of management activity per year. This equates to 10-25 x the scale of Buffalo Pike. HNF must provide its projected total budget and manpower and the costs/manpower allocated to the entire HS Project compared to the past five years to show that it will have the increased capability to manage this new project.</i></p> <p>Therefore one is forced to conclude that HNF has not demonstrated the track record nor has documented its ability to enforce BMP's in a manner sufficient to eliminate all sediment and nutrient runoff from the HS Project.</p>	
60-2.6	Dave Simcox 12-26-18	<p>What can HNF do to protect Indiana's long distance trails?</p> <p>It is long past due for the managers of our public forests in Indiana to recognize the value and importance of our long distance woodland footpaths. Given there are so few of these available in Indiana to those who seek to backpack, camp and day hike in deep woods, these special trails should be protected. To do so, there needs to be buffer zones (setbacks) along the entire length of the Knobstone (KT), Tecumseh and Adventure trails.</p> <p>The proposed HS Project encompasses sections of the KT west of the South Fork of Salt Creek. In Chapter 3 Page 28 of the HNF 2006 Land and Resource Management Plan (HNF 2006 Plan (4)) it states: "Visual and recreation opportunities are protected and enhanced". It is impossible to imagine how logging and burning along this trail can meet those requirements. Also there is no forest health justification for logging or burning along the KT. In fact we know that without the forest canopy along this trail combined with vehicle and equipment traffic from logging and burning, invasive species like stiltgrass would proliferate.</p> <p>Chapter 4 Page 8 in the same plan states: "Monitoring Requirement - Is trail use planned and implemented to</p>	<p>Effects to recreation and visuals are included in the draft EA.</p> <p>The Houston South project would follow all Forest Plan standards and guidelines.</p>

		<p>protect land and other resources, promote public safety, and minimize conflicts, with other users of the NFS lands? Method - Monitor selected trails. Evaluate the type and amount of use." There is no trail user survey data available for the KT section in the HS Project. The Biennial Report (2) on Page 63 states that not until 2019 will additional trail use be surveyed without mention of the KT. No disruption of this trail should be permitted until such data is available to determine the HS Project's impact on the KT trail and its user community.</p> <p>Therefore the HS Project cannot presume that logging will occur within the areas along the KT trail. Any option in the HS Project should prohibit logging or burning within 150 ft of either side of KT footpath. To be clear: we are not saying all trails in the HNF should have buffer zones. Nor are we saying the cutting of dangerous or overhanging trees should be banned. Any option should include buffer zones for this section of the KT in the HS Project and for future sections threatened by forest management activities.</p> <p>Compared to the currently proposed Houston South Project, any option should include evaluating 1) the impact on hiking and camping along the KT including estimates of the number of individuals involved per annum 2) the impact on tourism on the local economy and 3) the risk of increased occurrence of invasive plant species and the costs of treating them in the years following project implementation and 5) and include long distance trail buffers.</p>	
60-2.7	Dave Simcox 12-26-18	<p>What has changed since the HNF 2006 Plan?</p> <p>The population of Monroe Co has grown 16% in the past 12 years: In 2006 it was 126K In 2018 it grew to 147k Water supply demand on Lake Monroe has grown even more since 2006:</p>	<p>Negative effects to Lake Monroe from proposed project activities are not expected. Thus, the population of Monroe County, demand for water, water treatment, and recreation on Lake Monroe are beyond the scope of this analysis.</p> <p>Studies referenced by the U.S. Geological Survey (USGS) found excessive nutrients, primarily nitrogen</p>

	<p>City of Bloomington Utilities, the sole water supplier, said they now serve 145,000 customers In 2006 treatments were 13.5 MGD* on average to 19 MGD in the summer * Million Gallons Per Day Currently it processes 15 MGD on average to 23 MGD in the summer A 21% increase in the last 12 years for peak demand when treatment requirements would be the most strenuous.</p> <p>The demand for water treatment capacity and its inherent costs will increase as Monroe County, City of Bloomington and Indiana University grow. What will they be in 2030 or 2040 - 10 years after the HS Project is completed? What will be the impact of sediment loads and nutrients on water treatment requirements and algae blooms on Lake Monroe? HNF needs to factor into its decision making what will be the demand, capacity to treat and threat to water quality in the following decades.</p> <p>3. Recreational Advisories Have Increased Indiana Department of Environmental Management (IDEM) has issued Recreational Advisories for Lake Monroe in each of the past three years. Obviously, current and past practices and efforts to control nutrient and sediment runoff have not been nor are currently sufficient. Improvements are needed.</p> <p>Combined with warming temperatures in late summer, the risk of worsening algae contamination has become a reality. HNF must understand its role in protecting and sustaining Lake Monroe water quality before introducing more risk into the management equation.</p> <p>Therefore, the HNF 2006 Plan cannot be used as an accurate measure of Lake Monroe's importance and the threat posed by the HS Project.</p>	<p>and phosphorus, can lead to eutrophication. The USGS's Spatially Referenced Regression on Watershed attributes (SPARROW) model identified corn/soybean row crop as the main contributor of total nitrogen loads, while phosphorus loads were linked to non-recoverable manure from pastures (Bunch 2016).</p> <p>The U.S. Army Corps of Engineers LRL Water Quality Program Management Plan states, "General contributing factors that promote the formation of HABs are: ample sunlight, warm temperatures, low-water or low-flow conditions, and excessive nutrients (nitrogen and phosphorus)." "Most nitrogen and phosphorus pollution (i.e., eutrophication) comes from the runoff of agricultural fertilizer, lawn fertilizer, untreated human sewage (storm overflows) and untreated animal sewage from concentrated animal feeding operations."</p> <p>Effects to soil and water are included in the draft EA.</p>
--	--	---

60-2.8	Dave Simcox 12-26-18	<p>Does HNF know the economic value of Lake Monroe?</p> <p>It is not uncommon for mid-western lakes to suffer from uncontrolled algae blooms. See an Ohio State University study where uncontrolled algae growth resulted in \$153M in economic damage to residents living near just two small lakes in Ohio.</p> <p>The economic value of Lake Monroe needs to be understood by HNF in order to access the risk vs benefit of forest management activities in the Lake Monroe watershed. Refer to a 2016 US Army Corps of Engineers report for the economics of Lake Monroe driven by visitation.</p> <p>For additional reference purposes and a more extensive recent study conducted in Kosciusko County Indiana by the Lilly Center for Lakes and Streams estimates there is \$313M of economic value derived from the lakes in that northern Indiana county alone. The figures used in this study, the number of annual visitors, homes near the lakes and business activity driving that value, must be small as compared to Lake Monroe where IDNR estimates one million visitors per year.</p> <p>HNF points to the value that logging in the HS Project will be bring to the local economy. That measure must be weighed against the risk of impacting the overwhelming economic value of Lake Monroe.</p> <p>Therefore it is incumbent for HNF to incorporate the economic value of Lake Monroe in their risk assessments.</p>	<p>The economic value of Lake Monroe is beyond the scope of this analysis. See Response 60-2.7.</p> <p>The Houston South project proposes to treat vegetation and conduct related management activities to improve forest health and the sustainability of the oak-hickory ecosystems and to improve wildlife habitat. Timber harvest is a tool to accomplish this objective. The value that logging would bring to local community would be ancillary, not a stated purpose of the project.</p>
60-2.9	Dave Simcox 12-26-18	<p>What alternatives should be considered?</p> <p>We are told by HNF management that only two options will be considered for this project:</p> <ol style="list-style-type: none"> 1. Conduct the HS Project as proposed in the Houston south area as stated in the Final Notice or 	<p>Alternatives are created from issues derived from public comments. See Response 54-1.7 and 54-1.31.</p> <p>The Forest Plan EIS (USDA FS 2006b) analyzed effects to municipal watersheds (pages 3-230 to 3-321). The Forest Plan, tiered to the Forest Plan EIS, determined</p>

		<p>2. Do not conduct the HS Project.</p> <p>The public expects and deserves a more expansive range of Alternatives to be presented by the HNF National Forest staff well before the Final Notice is prepared.</p> <p>Within the HNF there exist numerous 2.8 General Classification Areas outside the Lake Monroe watershed. HNF must determine the following:</p> <p>1. What General Category 2.8 Areas are not in watersheds which supply drinking water directly to communities (Municipal Watersheds)?</p> <p>2. Can HNF accomplish their forest management goals in areas outside of Municipal Watersheds? If not, then why not?</p> <p>Then HNF must conduct a risk assessment for the proposed Houston South Project comparing it to other Alternatives. This assessment must include at a minimum:</p> <ul style="list-style-type: none"> a. threat to drinking water b. the cost to replace that sole source of drinking water c. threat to the local economy d. disruption of tourism e. increasing nutrient loading and sedimentation to the already 303d impaired bodies of water like the South Fork of Salt Creek 	<p>that timber harvest is an appropriate tool for use in this area.</p> <p>U.S. Geological Survey and the U.S. Department of Agriculture, Natural Resources Conservation Service delineated the National Watershed Boundary Dataset. From that dataset, the fifth-level hydrologic unit (10-digit HUC) defines a watershed.</p> <p>The Houston South Project is located in the South Fork Salt Creek Watershed, not within the municipal watershed of Monroe-Salt Creek watershed.</p> <p>The four watersheds that ultimately drain into the Lake Monroe Reservoir include the South Fork Salt Creek, Middle Fork Salt Creek, North Fork Salt Creek, and Lake Monroe-Salt Creek watersheds. The proposed Houston South project occurs in the South Fork Salt Creek watershed.</p> <p>Total prescribed fire treatments are 4.9% and silvicultural treatments make up 1.6% of the combined watersheds.</p> <p>We do not expect this project to have negative effects to Lake Monroe.</p> <p>Effects to soil and water resources are included in the Draft EA.</p>
61-1	Jeff and Kim Humphries, Midwest Trail Ride 12-21-18	<p>The Houston South Project will be a huge project and will affect many people living in and around the National Forest; not to mention the many recreational; users that plan their vacation time to visit the Hoosier National Forest. We have a business that is built on providing a place for visitors to stay while visiting the Hoosier National Forest. We employ people and sell the trail tags that generate revenues to do work on the trails. This project will also affect the other small businesses in the area that are dependent on</p>	<p>We understand the potential effects to Recreation and they were analyzed and effects disclosed in the draft EA.</p>

		recreational camping and trail riding such as restaurants, gas stations, etc.	
61-1.2	Jeff and Kim Humphries, Midwest Trail Ride 12-21-18	Closing 20 miles of trail in the Hickory Ridge Trail System will affect the recreational users in a negative way. That is half of all the trails in the Hickory System. Trail tags from recreational users (horses and bikes_ generate around \$80,000 annually to fund the trails that this project will impact. If you take away the trails from the recreational users, you will automatically cut this funding that impacts the Hoosier trails directly...maybe by half? The users will stop buying the trail tags and stop using our forest.	Concern that closing trails during periods of timber management could have negative impacts to recreationists is an issue that was analyzed and effects disclosed in the draft EA.
61-1.3	Humphries, Midwest Trail Ride 12-21-18	While we do not disagree with the problem the pine trees have created, as stated in your letter, we think you have to be careful in how removal will happen.	Comment noted.
61-1.4	Humphries, Midwest Trail Ride 12-21-18	...hold a public meeting so as to inform and answer more specific questions for the public affected by this project	Public meetings will occur.
61-1.5	Jeff and Kim Humphries, Midwest Trail Ride 12-21-18	Having experience with “loggers for contract”, you cannot count on them to “return the trails to their original state” as stated in your letter. That is simply not their expertise. Building recreational trails is a special skill, as outlined in your manual: USDA Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds. There will need to be a plan in place for clean up of the tops from the pines and a plan to re build the trails that the loggers will ruin.	There are a variety of ways to rehabilitate the trail or perhaps relocate them to more appropriate locations. Recreation and visuals were analyzed and effects disclosed in the draft EA.
61-1.6	Jeff and Kim Humphries, Midwest Trail Ride 12-21-18	Plan for a longer period or removal than 10 years so the pines can be removed slowly and carefully, so not to damage and “rape” the land In doing the project this way, our recreational user groups may still enjoy the forest and continue to purchase those “trail tags.” We would also suggest longing in the winter when recreation time is at the lowest.	Recreation and visuals were analyzed and effects disclosed in the draft EA.
61-1.7	Jeff and Kim Humphries, Midwest Trail Ride	We also would like to request a NEPA study be done on the entire project area (18,000 acres) before the loggers go in to be sure that no endangered plant or animal species will be harmed by the removal of the	A complete NEPA analysis is in progress. The district wildlife biologist completed a biological evaluation for threatened and endangered species.

	12-21-18	pine trees and the rebuilding of all these new roads, trails, and culverts.	
61-1.8	Jeff and Kim Humphries, Midwest Trail Ride 12-21-18	We also would like to see the US Forest Service plant hardwood trees in some areas to help facilitate healthy growth of new hardwood forest. Do not just leave areas bare to re-grow on their own, plant a few trees of the desired quality that the Forest Service wishes to generate new seedlings from.	Comment noted.
62-1	Julie Lowe Sierra Club, Winding Waters Group 12-22-18	Water quality is already an issue at Lake Monroe for drinking water and water recreation. Lake Monroe is often under advisory from the effects of blue-green algae. Water Quality Notice signs are posted at boat ramps and beaches around the lake warning that the water conditions, combined with weather (high temperatures) and high nutrient levels may result in harmful algal blooms. With the temperature now climbing into the 90's from May to as late as October this is a new development that deserves consideration	See Response 60-2.7
62-1.2	Julie Lowe 12-22-18	Biological contamination due to timber harvesting activities have occurred in Yellowwood Lake. Indiana State Forest logging has caused soil erosion and sedimentation in lakes. This should be considered regarding logging in the HNF in the Lake Monroe Watershed. If eroded soil reaches the lake, both phosphorus and the nitrogen in the soil will contribute to eutrophication further degrading the quality of the water in Lake Monroe.	See Response 60-2.7 and 60-2.9. Effects to soil and water resources are included in the draft EA.
62-1.3	Julie Lowe 12-22-18	This excerpt is from https://www.fs.usda.gov/main/hoosier/landmanagement/planning "The HNF Forest's conformance strategy focuses on addressing the purpose of the Forest Plan monitoring program as described in 36 CFR 219.12(a)(1) Our Forest monitoring program is geared toward assessing the quality of forest plan implementation and the plan contains one or more monitoring questions and associated indicators addressing each of the following eight requirements as noted in 36CFR 219.12(a)(5)." Although all eight monitoring questions are relevant to	Comment noted.

		<p>the Houston South project, the questions I'm most interested to be assessed are:</p> <ul style="list-style-type: none"> i The status of select watershed conditions iv. Measurable changes on the plan area related to climate change and other stressors that may be affecting the plan area. 	
62-1.4	Julie Lowe 12-22-18	<p>The science reported by Intergovernmental Panel on Climate Change and by the Purdue Climate Change Research Center is relevant to the Houston South project. Purdue reports that in the near future Indiana will be impacted by reduced water and air quality, increased heavy rainfall, and record breaking heat waves. "These projections generally suggest that the trends that are already occurring will continue and the rates of these changes will accelerate. They indicate that Indiana's climate will warm dramatically in the coming decades, particularly in summer. Both the number of hot days and the hottest temperatures of the year are projected to increase markedly. Indiana's winters and springs are projected to become considerably wetter, and the frequency and intensity of extreme precipitation events are expected to increase. "</p>	Climate change is addressed in the draft EA.
62-1.5	Julie Lowe 12-22-18	<p>Reconsideration of the 2006 Hoosier National Forest, Forest Plan and Final Environmental Impact Statement is warranted. Monitoring conditions on a forest ensure that projects are done in accordance with the plan direction and determine effects that might require a change in management. The decisions that are made by the Forest Service now can either help or hurt our environment. Not logging the older trees, including the pine stand can help sequester CO2 from the atmosphere. We are at a precipice regarding Climate Change. This is a fact and the 2006 Hoosier National Forest Plan should be re-assessed due to the dramatic changes that are occurring locally and on our planet.</p>	<p>The Hoosier National Forest operates under the 2006 Forest Plan, which is tiered to the Forest Plan EIS, which is valid until revised. There are no plans for a revision.</p> <p>Climate change is addressed in the draft EA.</p>
63	Paul Smith 12-22-18	<p>Absolutely terrible plan to destroy the forest in order to save it. Clear-cutting by any other name is still clear-cutting.</p>	Comment noted.

64-1	Robin Rupp 12-22-18	Please extend the comment period for the public to comment in public forums on the logging project (Houston South).	See Response #10
64-1.2	Robin Rupp 12-22-18	This is a serious issue and a threat to the Lake Monroe watershed. Please halt this project.	See Response 60-2.9
65-1	Rega Wood 12-22-18	Lake Monore is the principal source of our water in Bloomington, and we do not have enough information on this major logging project (Houston South) that will effect the water quality in the Lake Monroe watershed.	See Response #10
65-2	Rega Wood 12-22-18	<p>We have not had adequate opportunity to understand this project. In September we were informed only about preliminary descriptions; in October whn the HNF supervisor described the project we did not get information on the project details, only general management strategies.</p> <p>The Scoping Letter issued Nov. 26, contained a surprising announcement regarding forest burning, and more generally lacked the degree of specificity that would be required intelligently to comment.</p> <p>We need to have a longer comment period that includes public forums to learn about the Houston South Logging Project.</p> <p>The comment period is about to end, and the public has been provided neither enough time nor enough information to provide intelligent input.</p> <p>Please extend the comment period on the Hoosier National Forest, Houston South Logging Project.</p>	See Response #10
66-1	Bowden Quinn Sierra Club Hoosier Chapter 12-24-18	...mature trees absorb and store much more carbon than young vegetation. We ask that the Forest service estimate the potential carbon loss from the removal of the mature pines and the time it would take for the new growth to absorb an equivalent amount.	Carbon sequestration rates are addressed in the draft EA.
66-1.2	Bowden Quinn 12-24-18	...we ask that the Forest Service consider and address whether the urgent nature of the threat of climate change should require reconsideration of the 2006	Climate change is addressed in the draft EA.

		<p>Hoosier National Forest Land and Management Resource Plan.</p> <p>The Forest Service should consider whether projects like Houston South that are intended to promote oak and hickory growth by eliminating maples and beeches from the lower and mid-canopy are still necessary or if the impacts of climate change will achieve that effect without adding the carbon emission impacts of logging.</p>	<p>Wetter-loving species such as sugar maple, beech, and ash are predicted to be losers under predicted changing climate. As maturing oaks and hickories age and die, they are being replaced by trees such as maple and beech. This will lead to a beech-maple forest, the predicted losers, with no oak/hickory to regenerate.</p>
66-1.3	Bowden Quinn 12-24-18	<p>We would like to see much more analysis and discussion of what the existing level of sedimentation from the area is, how much the project might reduce this level taking in to account potential increases from logging, what procedures will be required to limit sedimentation from logging activities and how the Forest Service will enforce the procedures, and what steps will be taken to provide ongoing analysis of sedimentation from the area.</p>	<p>Effects to soil and water resources are included in the draft EA.</p>
66-1.4	Bowden Quinn 12-24-18	<p>We would like to see a fuller discussion about the net impact of road reconstruction and road obliteration or decommissioning. Will the total amount of roads increase? What is the potential impact of increasing access to remote areas and how effective are efforts to reduce illegal access from all-terrain vehicles? We would also like to see a fuller discussion of the impacts of logging on the Hickory Ridge trail system and on the Fork Ridge trails and what actions the Forest Service will take or require of contractors to restore and potentially improve the trails.</p>	<p>Effects to soil and water resources are included in the draft EA.</p> <p>The project proposes approximately 11.5 miles of new road construction, 8 miles of which are temporary roads. The Forest would close and stabilize or obliterate temporary roads constructed for timber removal upon completion of the sale. Temporary roads do not allow for long-term access for resource and management activities. New roads, including temporary roads, can provide access for ATV use on the forest. The installation of physical barriers such as gates or barrier posts would deter use.</p> <p>Effects on trails are included in the draft EA.</p>
67-1	Mary Madore 12-24-18	<p>Please extend the comment period for the Houston South Restoration Project. Mike Chaveas was asked to talk about this project at Friends of Lake Monroe public meeting: he did but the specifics were sparse.</p>	<p>See Response #10</p>
67-1.2	Mary Madore	<p>The community of people who drink water sourced from Lake Monroe have the right to know more about this</p>	<p>Effects to soil and water resources are included in the draft EA.</p>

	12-24-18	project and what HNF will do to prevent erosion of soil and nutrients into the South Fork, which is already compromised.	
67-1.3	Mary Madore 12-24-18	I receive my drinking water from B&B Water Project. The water we receive has one of the longest exposure periods to chlorine periods as any. When the organic concentration in the water goes up, so do the by-products of chlorination, some of which are known carcinogens. My 4-year old grand-daughter lives with her parents next door to us. She consumes this water and has since she was born. As a grandparent, I want the water she consumes to be at its highest quality possible to sustain good health.	Effects to soil and water resources are included in the draft EA.
67-.1.4	Mary Madore 12-24-18	Ideally, this project should be presented in detail, at a community forum, where key players can ask the important questions and HNF can give our community confidence that all the different factors involved in this project have been thoroughly thought out and planned for. For example, a graph of the amount of chemicals used to treat the drinking water and the concentration of byproducts in our finished drinking water from 2005 through the 2018, would give HNF and our community valuable information about the lake's history and quality.	Public meetings will occur when our analysis is complete.
67-1.5	Mary Madore 12-24-18	Please allow our community to learn more about a project which may impinge the health of Lake Monroe and the people who consume its waters. Please Michelle, extend the comment period.	See Response #10
68-1	Les Wadzinski 12-25-18	I am concerned about the 20+miles of that will be used for access to this project. I am also concerned that some roads will "provide access for future management opportunities", the implication being they would become permanent roads that may displace trails.	Effects to recreation are included in the draft EA.
68-1.2	Les Wadzinski 12-25-18	...a road does not make a good trail and a trail does not make a good road. ...many sections of the HNF trail system are old roads and the HNF recreation and engineering staff have tried very hard over the years to convert them to a trail like experience.	Effects to recreation are included in the draft EA.
68-1.3	Les Wadzinski	The scoping letter statement that "contactors would be required to return the trail to its original state as much	Effects to recreation are included in the draft EA.

	12-25-18	as possible” should perhaps be made more specific. The original state might not be that great to begin with and this would be the time to bring it to standard	
68-1.4	Les Wadzinski 12-25-18	I suggest contractors be required to use specific HNF best management practices rather than the vague “return the trail to its original state as much as possible.” Granted, trail width can’t be “returned” immediately, but things like drainage, gravel depth, gravel size, etc. can be returned or improved upon.	Effects to recreation are included in the draft EA.
68-1.5	Les Wadzinski 12-25-18	I would like to know the location of those roads that provide future access.	Maps are included with the draft EA.
68-1.6	Les Wadzinski 12-25-18	I support your intent to look for opportunities to improve poorly located trails.	Comment noted, thank you.
69-1	Carter Hays 12-25-18	I, as well as many other citizens from an array of communities who depend on Lake Monroe for their drinking water, and the surrounding forested landscape for recreation and quality of air and water, demand that the public comment period for this proposed decimation of the Houston South tract be extended.	See Response #10
69-1.2	Carter Hays 12-25-18	The environmental and economic affects (sic) of this project would be disastrous at best. This large area of land is a part of the Lake Monroe watershed. Clear cutting this land would lead to erosion and heavy sedimentation in the lake. In terms of economic consequence, I would urge you to read (Concealed Costs of State Forest Timber Sales)	Effects to soil and water resources are included in the draft EA. See Response 54-1.25
70-1	Tom Zeller 12-26-18	Timbering will increase erosion. The Forest Service has not met its own guidelines for monitoring and reporting on the Buffalo Pike cut. The Forest Service has not put forth a detailed plan for monitoring soil erosion (and deposition into Lake Monroe) for the Houston South Project, nor has it performed a baseline study for area so the amount of increase would be known.	Effects to soil and water resources are included in the draft EA.
70-1.2	Tom Zeller 12-26-18	Lake Monroe is a critical water supply for the region. It is also an important recreational and tourism magnet, generating more than \$20 million per year in tourism. Timbering in the watershed will increase sedimentation,	Effects to soil and water resources and herbicide use are included in the draft EA.

		affecting water quality and fish habitat. The proposed use of herbicides on thousands of acres will also increase the burden on the lake.	
70-1.3	Tom Zeller 12-26-18	The proposed activities will temporarily disrupt 20.6 miles of the Hickory Ridge trail and 3.5 miles of the Fork Ridge fork ridge. It would appear that the Forest Service does not value trail recreation. No-cut buffer zones should be established around trails to protect them from damage and disruption.	Effects to recreation are included in the draft EA.
70-1.4	Tom Zeller 12-26-18	Timber from public lands should be sold at market prices, which has not historically been true of sales from the Hoosier National Forest. The Forest Service should evaluate its procedures for timber sales to understand why it is receiving less than fair market value and make adjustments to the procedures. Accounting for timber sales should be sufficient to determine the true cost of, and hence actual profit or loss from, the sale. The cost of road-building should be included in the cost of the timber sale. Stand marking should include an indication of veneer and other high-quality trees and the sale price should reflect the quality of the stand. The Forest Service should consider the value of the undisturbed forests as a tourism magnet for the area, which likely exceeds the income from timber sales. The sale of timber lands must, by the basic laws of economics, depress the value of private woodlot timber sales, raising the question of the appropriateness of such sales, especially in light of the values of an undisturbed forest.	See Response 54-1.25 Timber harvest is a tool to accomplish the proposed action, not the reason for the project.
70-1.5	Tom Zeller 12-26-18	The proposed project includes fifteen miles of new roads and reconstruction of an additional seven miles. Construction of roads is disruptive to the forest ecosystem. Roads are the antithesis of the typical desired woodland recreational experience. No one's idea of forest recreation is walking down a thickly graveled road to a clear-cut. The cost of roads should be included in the cost of harvesting the timber, as otherwise they would not be necessary.	Effects to plants and wildlife are included in the draft EA. Effects to recreation are included in the draft. See Response 54-1.25

70-1.6	Tom Zeller 12-26-18	<p>The Indiana Bat has been listed as endangered since 1967. USFWS lists one of the main vulnerabilities for the bats is the reduction of summer habitat.</p> <p>I feel that the use of a categorical exclusion for the Buffalo Pike cut was inappropriate and therefore the much larger Houston South Project likewise should not go forward based on a CE.</p>	The Houston South project is not analyzed under a CE, an EA was prepared.
70-1.7	Tom Zeller 12-26-18	<p>The project proposes to burn essentially all of the project area (10,200 to 12,300 acres, with the latter number representing the addition of willing participation by adjacent landowners). That is excessive and heavy-handed management that fails to recognize the value of an undisturbed ecosystem. Burning will disrupt forest recreation. It also fails to recognize the negative effects on some of the ecosystem's inhabitants such as amphibians, small mammals, insects, and ground nesting birds. It should be noted that affected ruffed grouse and woodcock have been designated by the regional forester as "sensitive species."</p> <p>In their synthesis of fire-oak literature Daniel et. al. state: "mid-spring prescribed fires are probably disruptive to ground-nesting birds such as ruffed grouse, wild turkey, and several species of neotropical songbirds and are potentially lethal to herpatofauna just emerging from winter hibernation (Beaupre and Douglas 2012)."</p>	<p>Effects of prescribed fire are included in the draft EA.</p> <p>Regional Forester's sensitive species was analyzed in a biological evaluation and effects disclosed in the draft EA.</p>
70-1.8	Tom Zeller 12-26-18	The Forest Service maintains that the existing oak-hickory forest is the result of near-constant and nearly complete fire-based management of the forest by Native Americans. While certainly some natural fires must have occurred, there is little or no strong evidence that such comprehensive management by Native Americans occurred with such regularity and on a scale that would essentially create the modern Hoosier National Forest, and frankly I find this narrative to be unlikely. The academic literature points to evidence of past fires, and evidence of some forest management by Native Americans, especially on the Eastern seaboard,	Prescribed fire is a useful tool in upland oak silviculture and ecosystem restoration because fire was a widespread disturbance on the landscape since the end of the last ice age and prior to Euro-American settlement. Paleoecology studies in the region have found charcoal dating to at least 5,000 to 10,000 years before present (Brose et al. 2014). Modeling based on inputs of climate, population density, fuel dynamics, seasonality, and species susceptibility estimates that the mean fire interval (MFI) for the period of 1650-1850 varied from 8-12 years in southern Indiana (Guyette et al. 2012). Based on tree ring fire scar analysis using

		but only a presumption that Native Americans must have done such extensive burning in the Midwest. My understanding is that during pre-European settlement times, southern Indiana was a mostly unsettled commons used as a hunting ground for Native American groups that surrounded it, and there would be little motivation for a small transient population to perform such major landscape alterations.	dendrochronology, Guyette et al. (2003) found that the MFI for the period 1656-1992 was 8.4 years in the Boone Creek watershed of Perry County, Indiana.
70-1.9	Tom Zeller 12-26-18	The main elements of the proposal, timbering and burning, are predicated on the need for regeneration of oak-hickory after timbering. Despite decades of research, the approach of a two-stage harvest with intervening burning does not have a long enough track record to be convincing. Implementing this strategy on one of the world's best oak-hickory forests, perhaps the best oak-hickory forest, reminds me of the now-horrifying early attempts at restoring painting masterpieces. We have an oak-hickory forest, but it seems we must cut it down to save it.	There are currently oak and hickory stands in the project area. However, a transition has begun in the understory and midstory. The species growing in these canopy levels are shade tolerant. There are very few areas where oak or hickory species are able to compete to be a part of a future stand. This trend is typical of areas that have not been managed for many years and fire has been excluded.
70-1.10	Tom Zeller 12-26-18	<p>I have monitored Forest Service management of the Hoosier since the 1984 plan was released. At that time, the environmental community pointed out that the clear-cuts of the 1960's in what had been oak-hickory forest was resulting in a transformation into a beech-maple forest type. The forest service denied this conversion was taking place for about a decade. In the 90's the forest service admitted the conversion was underway, but that the oak-hickory forest was an anomaly, the result of bad land use practices including overgrazing in the 1920's and 30's, and therefore it didn't matter that the conversion was taking place and that cutting should continue. By the 2000's burning was the new management tool, and like an eight-year-old with a new toy, everything must be burned. Literally everything in this project area is slated for burning.</p> <p>Now the story is that the current oak-hickory stands only exist because of Native American burning, and therefore the cutting should continue coupled with burning. This conclusion is based on very thin</p>	<p>Native Americans burned to clear land for agriculture, aid in hunting, and stimulate plant growth (Parker and Ruffner 2004).</p> <p>Paleo and dendroecological evidence suggest that oak recruitment and fire have gone hand-in-hand for hundreds and thousands of years. The interruption of this cycle in the 19th and 20th century has led to the decline of oak species and a near cessation of oak recruitment on all but the most inhospitable sites (Abrams 2006).</p>

		academic evidence hedged with a lot of phrases like “might have” and “probably,” and on conclusions based on extensive extrapolation from known Native American use of fire in managing the landscape on a small scale near villages.	
70-1.11	Tom Zeller 12-26-18	<p>In its zeal to promote timber harvesting, it seems the Forest Service is overlooking nature’s own management techniques of windfall and lightning strikes. Such events would provide smaller openings in the canopy than the Forest Service’s planned large-scale harvesting cuts, but these small windfalls across the forest might result in sufficient amount young age acreage to approach the 4-12% that the Forest Service finds optimal. While it is true that some existing oak-hickory sites might mature into beech-maple climax forest type, not all sites would do so, especially those with more xeric (dry) conditions that favor oak-hickory such as south-facing slopes and those with thin soils.</p> <p>It seems the Forest Service is embarking on a grand experiment, one which risks the near elimination of the current dominant oak-hickory forest in the state.</p>	Stand data in the proposed silvicultural treatment area shows no stands in the 0 to 9 year age class, therefore the desired amount of early-successional forest habitat described in the Forest Plan (4-12%) is not being met.
70-1.12	Tom Zeller 12-26-18	<p>While a young forest grows faster than a mature forest, with a moment’s reflection one realizes that despite the growth rate, a young forest does NOT store as much carbon in 50 years as the mature forest held at age 100 when it was cut. This is because the mature forest also experienced the faster growth rate during its first 50 years, and then continued to grow, albeit at a slower rate, for another 50 years.</p> <p>Thus, while the growth rate is an important factor, ultimately it is the amount of carbon held in storage out of the atmosphere that matters most. So, what happens to the carbon in the mature forest that is harvested? For starters, less than half of the carbon-storing wood becomes long-lasting building materials. Half the carbon is returned to the atmosphere relatively quickly from the soil disturbance, the brush and treetops left behind, wood chips used for burning, and</p>	Carbon storage is included in the draft EA.

		<p>so forth. In fact, so much carbon is lost from the deadwood and forest floor litter that a new forest requires about 15 years of growth to contain as much carbon as the site contained immediately following the harvest and removal of mature trees.</p> <p>In conclusion, maximum carbon sequestration will occur in a forest that is not constantly harvested for timber.</p>	
70-1.13	Tom Zeller 12-26-18	<p>Robinson et. al. found that forest fragmentation reduces nesting/reproductive success, with up to 95% predation by cowbirds (<i>Molothrus ater</i>), resulting in the forest being a “sink,” or net negative to population reproduction, to the nine neotropical species studied. Specifically, they state that “cowbird parasitism was negatively correlated with percent forest cover for all the species” studied. In addition, other nest predators such as mammals, snakes, crows, blue jays, and raccoons are “likely to be more affected by landscape-level habitat conditions.” The authors conclude “a good regional conservation strategy for migrant songbirds in the Midwest is to identify, maintain, and restore the large tracts that are mostly likely to be populations sources. Further loss or fragmentation of habitats could lead to a collapse of regional populations of some forest birds. Land managers should seek to minimize cowbird foraging opportunities within large, unfragmented sited.”</p> <p>While it is true that cutting mature forest and thus introducing very young forests would result in an increase in diversity of habitat and thus bird species, this is only true if one considers the national forest in a vacuum. In fact, the forest is surrounded by young forest. Young forest is not in short supply in the area. Therefore, the notion that a mature forest must be cut down to provide this type of young forest diversity is wrong-headed and is an indication of the tunnel vision on the part of the Forest Service. Sadly, despite nearly 100 years since the phrase “ecology” was first coined the agency still equates the its stated goal of protecting</p>	<p>The Forest Plan EIS states, “clearing of woodlands and urban development are permanent changes that contribute to habitat fragmentation, timber harvesting results in temporary reductions in habitat quality and quantity for some species. Fragmentation of forest age classes, which leaves a forest matrix intact but with several different age classes can have both beneficial and adverse effects depending on the species” (USDA FS 2006b, p. 3-89). As a forest proceeds through successional changes, different species of wildlife use the area.</p> <p>The Forest Plan EIS addresses the need for young forests. The EIS states, “While most private forests are harvested every 10 to 20 years (Unversaw 2002), private forests provide very little early successional habitat for wildlife species. NFMA regulations require the provision of habitat for species viability within the planning area. Although private lands may contribute to, or hinder, the maintenance of species viability on NFS, the Hoosier can not rely on these lands to meet policy requirements for species viability” (USDA FS 2006b, p.3-163).</p> <p>This project is consistent with and implements Forest Plan direction to maintain 4 to 12 percent of the area in young forest habitat.</p>

		the health of the forest with assuring maximization of timber output.	
70-1.14	Tom Zeller 12-26-18	The actions proposed for the Houston South Vegetation Management and Restoration Project would have a negative impact on recreational use of the area. The over-management prescribed would result in numerous trail closures. As the general public does not follow the Forest Service activities closely, most recreationalists will plan an event and travel to a site only to find it is unavailable. This would not only represent a one-time lost opportunity, but also discourage future visits to the forest.	Effects to recreation are included in the draft EA.
70-1.15	Tom Zeller 12-26-18	Soil erosion from the intense management prescribed could have an impact on recreation on Lake Monroe. Already shallow bays are noticeably silting in and being clogged with invasive water plants. The additional silt load from burning and timbering will only exacerbate these problems. Fishing is a major recreational activity on Lake Monroe. The Forest Service has not performed baseline monitoring of soil erosion from its land and is not in a position to estimate the amount likely to result from these management activities. It therefore cannot state with any certainty the impact on fish nesting and resulting effects on fishing recreation on the Lake.	Impacts on recreation on Lake Monroe is beyond the scope of the Houston South project. Effects to soil and water of the project area and the South Fork Salt Creek Watershed are included in the draft EA.
70-1.16	Tom Zeller 12-26-18	The value of the Hoosier National Forest as an outdoor activity tourist magnet far exceeds its value as a tree farm. About a million people live within a day-trip's drive to the forest. Expenditures for meals, lodging, gasoline, gear, and incidentals that result from visits to Lake Monroe generates more than \$20 million per year in tourism annually, according to the Corps of Engineers.	Timber harvest is a tool to accomplish the proposed action, not the reason for the project.
70-1.17	Tom Zeller 12-26-18	The project plan calls for removing the 500 acres of pine in the project area. While pines aren't native, they aren't spreading and are doing no real harm to the forest. They do provide a unique habitat for a few species of birds. Hikers and campers universally enjoy the pine areas.	As the nonnative pine stands mature, the canopy grows closer together and reduces the amount of sunlight reaching the forest floor. The ground beneath the stands in many places has little or no other plants growing underneath to provide cover or food sources for wildlife. Studies have shown that pine plantations provide less suitable habitat and less biodiversity than native forests (USDA FS 2006b, p. 3-82).

70-1.18	Tom Zeller 12-26-18	<p>As I take part of my precious Christmas Day to finish these comments, I must remark that having comments on this project due on December 26 indicates either a conscious attempt to minimize public input or a stunning lack of sensitivity to the effort required for a citizen to digest and consider the proposal, research specific concerns, and write meaningful comments on a project of this scale. In either case, it does not indicate a true spirit of partnering with the public to collect concerns and viewpoints from outside the Forest Service. A real Grinch move.</p> <p>The members of the governing bodies of both the City of Bloomington and Monroe County expressed serious reservations about the project. Yet a request for an extension was denied. This lack of meaningful dialogue between the Forest Service and local government is unfortunate.</p>	See Response #10 and 14.1
70-1.19	Tom Zeller 12-26-18	...the Forest Service doesn't seem to be able to see the forest for the trees. Since its inception it has focused on maximizing timber production, and despite decades of increasing ecological awareness the agency's proposal would be unchanged if that were the only goal. The prescription hasn't changed, only the agency has learned to dress its underlying motivation in the sheep's clothing of science and claimed ecological necessity	Comment noted.
70-1.20	Tom Zeller 12-26-18	...the Forest Service does not seem to recognize that every disruption to the forest has an ecological cost. An activity designed to benefit one aspect of the forest inevitably damages another aspect. The aspects of the ecological system of the forest beyond timber production and perhaps maximizing game, go unnoticed and unvalued by the Forest Service.	Comment noted.
70-1.21	Tom Zeller 12-26-18	...the Forest Service fails to recognize the value of natural forest processes. Beyond the strictly hands-off nature of an official wilderness, a forest can be actively but lightly managed. Unfortunately, the incentives in the bureaucracy all reward more disruptive management. Fish gotta swim, birds gotta fly, foresters gotta harvest.	Comment noted.

71-1	Mary Rothert 12-26-18	The proposed timber harvest, proposed burning schedule, pine removal, and herbicide use will harm wildlife, cause erosion, obstruct recreation, and threaten the waters in the Lake Monroe watershed.	Environmental effects are analyzed and documented in the draft Environmental Assessment (EA).
71-1.2	Mary Rothert 12-26-18	Wildlife, particularly ground living/nesting animals, will clearly be affected. The proposal ignores the needs of the Indiana Bat and many sensitive bird species.	See Response 71-1
71-1.3	Mary Rothert 12-26-18	Over the years we have watched the life span of Lake Monroe, our only water supply, be shortened by silting. The work being proposed will increase the problem through erosion, especially on such steep slopes, and the herbicides will endanger waters that are already struggling to provide potable water in our area.	See Response 70-1.15
71-1.4	Mary Rothert 12-26-18	Recreational use of our area's public forests is already damaged by state forest timbering. This addition harvesting will affect almost 21 miles of hiking trails and I see no effort promised to buffer harvest activities near trails.	Effects to recreation are included in the draft EA.
71-1.4	Mary Rothert 12-26-18	Massive cutting of mast-producing oaks and hickories to regenerate oaks and hickories appears problematic to me. Data on timber removal in our area indicates that such a plan produces plentiful invasive species but not oaks.	Potential spread of nonnative invasive plant species is included in the draft EA.
71-1.5	Mary Rothert 12-26-18	On the other hand, those standing trees are positioned to provide 50-100 years of high-quality wildlife and recreational benefits.	This project is needed to maintain the oak/hickory forest. See Response 70-1.9
71-1.6	Mary Rothert 12-26-18	The promised benefits of burning appear to be based on "maybe" research. The risk to our forested public land is simply too great.	See Response 8-1.3
72-1	Julie James 12-26-18	I've become very disappointed with the devastation of our forests, treasures of the state, as the DNR logs more and more and more trees to the point of obvious unsustainability. Now I hear there are several thousands of acres to be logged in Hoosier National Forest. And even worse, it's to be done in the watershed of the Bloomington area's drinking water: Lake Monroe. Please stop this plan. You will cause erosion and run off that will impact our water. If you must log then please do so in an area that will not impact the drinking water of our community.	See Response 60-2.9

72-1.2	Julie James 12-26-18	Also, I request a longer period of time for the public to be able to comment on this issue.	See Response #10
73-1	Allen Pursell TNC 12-26-18	The maintenance or creation of young forest habitats, which appear to be near-absent on the Hoosier NF in the Houston South Project Area will require active management. Controlled fire will be exceedingly useful, but not entirely sufficient. The removal of non-native pine stands, even-aged harvesting techniques that create “thickets”, and gap creation by way of thinning, will all be necessary. A recent paper that researched the effect of different harvesting techniques on many songbird species noted that even “mature forest” birds demonstrated positive responses to these kinds of management	Thank you for your comments.
73-1.2	Allen Pursell TNC 12-26-18	Disturbance techniques will be necessary to replace the existing canopy oak trees as well. While forest structure is very important to songbird conservation and management, having the right native forest composition cannot be overlooked. As forests that are now dominated by oak and hickory are slowing being overtaken by beech and maple there will be significant negative effects to some songbirds. While many studies indicate the importance of oak to wildlife, the study quoted here points out the importance of white oak in particular to Cerulean Warblers, which have declined dramatically since 1970.	Thank you for your comments.
73-1.3	Allen Pursell TNC 12-26-18	In addition to the previous remarks about songbirds we also ask that the Hoosier NF consider the possibility of using shelterwood with reserves rather than the regular shelterwood technique. It seems beneficial that when possible reserve trees be left in place to ensure seed source over the long-term and to create additional structural complexity.	Per Forest Plans standards, we do not harvest shellbark or shagbark hickories unless the density of these species is greater than 16 trees per acre, meaning they are left as reserve trees in all harvest types where they occur. Also, per Forest Plan standards for MA 2.8, we are limited to 10 acre openings created by clearcut and shelterwood harvests. This means swaths of trees that could be used as cover for songbirds are left between each 10 acre, even-aged harvest unit.
73-1.4	Allen Pursell TNC 12-26-18	We believe that invasive plants must be suppressed prior to and after implementation of any management activities. The spread of these invading plants continues to be a scourge and efforts must be made to halt or dramatically slow their advance at a minimum.	Potential spread of nonnative invasive plant species is included in the draft EA.

74-1	Cale J Ulery 12-26-18	Please stop the plans of logging Lake Monroe's Watershed Forest. The forests are our last stand against climate change and old growth forests have already been comprised for profit in this state too many times.	Comment noted.
74-1.2	Cale J Ulery 12-26-18	Please continue to fight and protect the gorgeous and life saving southern forests of our state. I live in southern Indiana and witness and feel the power our forests hold every day. I beg of you to take the proper action to find an alternative solution.	Comment noted.
75-1	David H Seastrom 12-26-18	In regards to the proposed logging plan in Houston South, because it is in the watershed of Lake Monroe, I consider this choice to be irresponsible and ill-advised. No matter how carefully executed, or how carefully the guidelines are followed, there is no question that the ideal way to prevent soil erosion is to leave this forest intact. There is no argument that can contradict this fact.	See Response 60-2.9
75-1.2	David H Seastrom 12-26-18	Considering the vital importance of Lake Monroe to the 120,000 people who depend on it as their only water source, I believe it's a error of judgment to continue with this proposal. Among the other management concerns, sediment loading, which is an inevitable consequence from logging on hillsides, has been linked to toxic blue-green algae blooms that not only affect water quality, they pose a hazard to the thousands of recreational users of the lake.	See Response 60-2.9 and 60-2.7
75-1.3	David H Seastrom 12-26-18	It's irresponsible to take any risk whatsoever as it concerns this body of water. There are many other forest tracts under your management, and it would be a far better choice to shift this proposed plan to tracts that are not in the watershed.	See Response 60-2.9
75-1.4	David H Seastrom 12-26-18	The question is, what is the greater good for the public. The short term desire to manage these 4,000 acres is far outweighed by the necessity to maintain the integrity of this body of water. Both the forest and the lake are owned by the public, and proper management dictates that the public needs must come first.	Comment noted.
75-1.5	David H Seastrom	The choice between oak-hickory generation in a given tract of federal forest land, and jeopardizing a	Environmental effects are analyzed and documented in the draft EA.

	12-26-18	irreplaceable water source for an ever growing population that's facing the consequences of global climate change, that includes predictions for long annual periods of drought, points to only one conclusion. As government agents it's your responsibility to act on behalf of what is obviously the best interest of the public, and abandon this management plan from tracts that are in the watershed of Lake Monroe.	
76-1	Randall J. Pflueger KTHA 12-26-18	As it appears in the scoping maps, the Project is in close proximity to nearly all of the HNF trails comprising the KT in the HNF... KHTA asks that consideration be given to providing buffer areas, effectively a corridor, around these trails.	Effects to recreation and visuals are included in the draft EA.
76-1.2	Randall J. Pflueger KTHA 12-26-18	From the viewpoint of hikers, for whom the KHTA must advocate, this mixed mesophytic forest would be a perfectly acceptable venue for hiking. It is certainly preferable to hiking through early successional growth or clear cut.	See 76-1
76-1.3	Randall J. Pflueger KTHA 12-26-18	The rationale for costly intervention to save the oak-hickory ecosystem, to the point of constructing roads, harvesting timber, and altering the character of the forest for the foreseeable future, should be subjected to further examination.	Comment noted.
77-1	Justin Whitaker 12-26-18	Many portions of the project including pine clear-cuts, fire regeneration, 'crop tree release' etc are well defined in the project plan and clearly supported by the described conditions. However "Hardwood Thinning", the proposed action for largest amount acreage (second only to fire) is receives only a few vague sentences about "healthy forest structure". As the planned treatment for the second largest amount acreage, much more detail needs to be provided to the public about what this thinning would entail. What % of trees, what species, what age? I do not support this project moving forward until much more detail is provided about this proposed "hardwood thinning".	More details regarding hardwood thinning are included in the draft EA.
77-1.2	Justin Whitaker 12-26-18	The project proposes to use sections of trails affecting 20.6 miles of the 48.7 mile Hickory Ridge Trail System" That is quite disappointing. I frequent this trail system	Effects to recreation and visuals are included in the draft EA.

		and it is one of the few places left in the state that feels truly wild where you are not confined to a predetermined, polished loop trail like the state parks. At the very list I hope that project staging is managed in such a way to PRIORITIZE trail access, impacting no more than maybe a quarter of the proposed total impact in any given year. It also states later that "contractors would be required to return the trail to it's original state as much as possible". Based on my previous experience with logging projects "as much as possible" typically means not at all. PLEASE, PLEASE, PLEASE hold your contractors accountable to this statement. The same goes for "visual quality". Sounds nice in project plan. I have yet to see it achieved, unless piles of discarded vegetation qualifies as "visual quality".	
77-1.3	Justin Whitaker 12-26-18	"Cultural Resources" get 10 - 20M buffer zones, why could recreational features like trails not also get a buffer zone? Better yet, shouldn't trails themselves be considered "cultural resources". Am I to understand that the Forest Service cares more about dead people than living ones??	The National Historic Preservation Act (NHPA) of 1966, as amended, requires Federal agencies to consider the effect of their undertakings on historic and prehistoric properties (56 U.S.C. §306108 and 36 CFR Part 800). Buffers zones ensure the protection of any potentially eligible sites.
78-1	Heather Blair 12-26-18	The proposed clearcutting is problematic on multiple fronts. Clearcutting feeds into erosion, which is a serious issue given the heavy rains and thin topsoil we see in this region—not to mention the steep slopes in the area concerned. The fact that the land in question is part of a watershed that provides the sole source of drinking water to tens of thousands of people adds serious health concerns to the problems of compromised soil health and sediment runoff. Furthermore, whereas clearcutting can be effective in Western montane coniferous forests, it does not improve forest health in deciduous hardwood forests. Please drop this element of the plan!	See Response 60-2.9 Effects to soil and water are included in the draft EA. Clearcuts are proposed to convert nonnative pine stands to native hardwood, while providing important early successional habitat.
78-1.2	Heather Blair 12-26-18	Detailed explanations of herbicides to be used in the area have not been furnished to the public. Again, this is a giant problem for the 270,000-acre Lake Monroe Watershed and all who depend upon it. Herbicides are	Herbicide use is included in the draft EA.

		toxic—that's how they work. And poison of any sort does not belong in our drinking water.	
78-1.3	Heather Blair 12-26-18	I absolutely support the removal of invasive species to improve forest health. And selective removal of trees can indeed improve forest health. However, removal of native understory species such as dogwood and redbud does not improve forest ecology. The plan also calls for successive waves of logging for oak and hickory, with the stated aim of increasing the percentage of oak and hickory in the future. Cut oak and hickory so you can have more oak and hickory? That does not make sense. Please let the native trees grow and remove the pine.	See Response 70-1.9
79-1	Tim Maloney HEC 12-26-18	The Plan's Goals and Objectives include "Maintain and Restore Watershed Health". The Houston South project should be analyzed in the context of this goal: what are the activities occurring in and nearby the HNF, how are they affecting the health of the Lake Monroe watershed, either positively or negatively, and how will the Houston South project contribute to achieving this goal?	Effects to soil and water in the project area and the South Fork Salt Creek watershed are included in the draft EA.
79-1.2	Tim Maloney HEC 12-26-18	We understand that the HNF has begun baseline aquatic species monitoring in the Houston South project area. Will a baseline survey for all forest species present in the project area be completed?	There is no law, regulation, or policy that requires a survey for all forest species. Biological evaluations for Threaded and Endangered Species and Regional Forester's sensitive species were prepared and summarized in the draft EA.
79-1.3	Tim Maloney HEC 12-26-18	Prior to the project decision, the project area should be surveyed for potential special areas and RNAs.	There are no Special Areas (MA 8.2) or Research Natural Areas (MA 8.1) in the project area.
79-1.4	Tim Maloney HEC 12-26-18	Table B.6 of Appendix B of the HNF Plan indicates that 92,972 acres of the HNF are not appropriate for timber production, including bottomland areas of Management Area 2.8. Have these bottomland areas in the Houston South project area been identified and mapped? If so, please provide a copy of these mapped areas.	The Land Suitability Class is identified and mapped, but will require an on-ground evaluation.
79-1.5	Tim Maloney HEC 12-26-18	Management Area guidance does not mandate that allowable management activities, such as vegetation management, actually take place. "The revised plan for the Hoosier National Forest is permissive in that it allows, but does not mandate projects and activities."	This project is consistent with and implements Forest Plan direction to maintain 4 to 12 percent of the Management Area in young forest habitat.

		<p>(Record of Decision, Final Environmental Impact Statement for the Land and Resource Management Plan, Hoosier National Forest, January 11, 2006, page 2).</p> <p>Thus, the HNF has wide latitude in determining what mix of management actions, or natural processes, will move a particular management area toward the desired condition, as well as achieve the other goals and objectives of the Forest Plan.</p>	
79-1.6	Tim Maloney HEC 12-26-18	<p>As of January 2019, thirteen years will have elapsed since the current HNF plan was adopted. Given that the Forest Plan allows for flexibility in management decisions, and that conditions on the ground in the HNF, and in neighboring communities will have changed, it is important that proposed projects consider in detail what conditions have changed over this period and how these changing environmental, economic, and social conditions would or should affect management decisions. In the case of the Houston South project, changes in land use, population growth, and other natural resource development in the Lake Monroe watershed should be considered. One credible source for economic and demographic data including changes over time is Stats Indiana: http://www.stats.indiana.edu/</p>	<p>Issues, identified and based from comments, guided the analysis of environmental effects, including cumulative effects, of the proposed action and its alternative.</p> <p>The relevant significance intensity factors (40 CFR 1508.27) also guided the analysis to provide enough evidence to determine whether to prepare either an Environmental Impact Statement or a Finding Of No Significant Impacts (40 CFR 1508.9).</p>
79-1.7	Tim Maloney HEC 12-26-18	<p>Lake Monroe and its surrounding lands are a very popular destination for boaters, hikers, campers and anglers. According to the Indiana DNR, nearly 1 million people visited the DNR-managed recreation areas at the lake in 2017. Visitor spending within 30 miles of Lake Monroe topped \$27 million in 2016 (U.S. Army Corps of Engineers, Monroe Lake, Recreation 2016...</p> <p>The value of Lake Monroe goes well beyond recreation and tourism benefits. The Lake is a primary drinking water source for 145,000 area residents, supporting the growing population of Monroe County (City of Bloomington Utilities Department, August 24, 2017). Both the recreation value and drinking water value of the Lake depend on clean, safe water. But this</p>	<p>We acknowledge the value of Lake Monroe, however it is beyond the scope of this analysis. See Response 60-2.8 and 60-2.9.</p> <p>Effects to soil and water in the project area and the South Fork Salt Creek watershed are included in the draft EA.</p>

		<p>outcome is not always a certainty given the threats to the Lake's quality from land uses in the watershed.</p> <p>Given the above, any forest management activities occurring on the HNF lands within the Lake Monroe watershed should not only prevent any adverse impacts to water quality, but also serve to improve and enhance the health of the Lake Monroe watershed.</p>	
79-1.8	Tim Maloney HEC 12-26-18	<p>The Houston South scoping letter indicates there will be a substantial amount of road construction and reconstruction totaling 22 miles. This road construction will directly affect HNF trails, with miles of road reconstruction occurring on existing trails including the Fork Ridge trail and Hickory Ridge trails. There is no indication how many miles of the new roads will be temporary versus permanent. The impact to trail quality and trail user experience, even where trails displaced by roads are reconstructed, will be considerable. The project map identifies the location of new/reconstructed roads – but not ones that will be obliterated or decommissioned. Road construction may also increase sedimentation entering Lake Monroe's tributaries. The construction of 15 miles of new roads is likely to more than offset any benefit from repairing existing poorly maintained roads.</p>	<p>Approximately 11.5 of new road construction is proposed, 8 miles of which are temporary roads. Approximately 5 miles of roads are proposed for reconstruction. Approximately 3 miles of roads are proposed to be decommissioned. The updated maps included with the draft EA will contain this information.</p> <p>Effects to Recreation are included in the draft EA.</p> <p>Effects to soil and water from road construction are included in the draft EA.</p>
79-1.9	Tim Maloney HEC 12-26-18	<p>The thousands of acres disturbed by harvesting and thinning activities along with the 22 miles of road construction/reconstruction will make the project area more vulnerable to the spread of non-native invasive species including multiflora rose, Japanese stiltgrass, and other invasive plants. There is little information provided concerning actions to prevent this harmful outcome. As noted in a U.S. Forest Service report on Japanese stiltgrass, "In all cases, Japanese stiltgrass spread from small source populations on sites where heavy equipment was used." (Fryer, Janet L. 2011. <i>Microstegium vimineum</i>. In: Fire Effects Information System</p>	<p>The potential spread of non-native invasive plant species is included in the draft EA.</p>
79-1.10	Tim Maloney HEC	<p>The scoping letter reports there is a need to create of a mosaic of forest conditions in the project area, and that</p>	<p>The Forest Plan EIS addresses the need for young forests. The EIS states, "While most private forests are</p>

	12-26-18	the existing inventory of forest stands indicates there is an insufficient percentage of young (0 to 9 years) forest. The HNF evaluation of forest inventory data for the project should include the surrounding and interspersed private and other non-HNF lands to gain a broader landscape level view of the existing mosaic of forest ages. Since the proposed project contemplates including non-HNF lands in its prescribed burning activities, it should also consider the existing forest conditions, types and ages on those lands as well when considering management activities.	harvested every 10 to 20 years (Unversaw 2002), private forests provide very little early successional habitat for wildlife species. NFMA regulations require the provision of habitat for species viability within the planning area. Although private lands may contribute to, or hinder, the maintenance of species viability on NFS, the Hoosier can not rely on these lands to meet policy requirements for species viability” (USDA FS 2006b, p.3-163). This project is consistent with and implements Forest Plan direction to maintain 4 to 12 percent of the area in young forest habitat.
79-1.11	Tim Maloney HEC 12-26-18	<p>The project scoping letter restates information in the HNF Plan that intensive management – using harvesting, fire, and herbicides – is needed on the Hoosier to maintain its oak and hickory component. But this oversimplifies both the concern and solution because:</p> <ul style="list-style-type: none"> a) it doesn't give sufficient weight to the effect of site, slope, aspect and soils in determining whether oaks and hickories will regenerate successfully at a particular location; b) it neglects the significant role that natural disturbances play in forest succession, even in the absence of naturally-caused fires. These disturbances include windthrow and other weather-related impacts, and the natural death and toppling of large old trees which can create significant canopy gaps that allow more light to reach the forest floor and favor shade-intolerant species; c) it fails to consider the impacts of climate change, which are predicted to create warmer, drier conditions during parts of the growing season that will favor xeric species like some of the oaks. 	<p>The project area varies by site. In general, the drier sites are predominantly mixed hardwoods with a greater percentage of oak-hickory stands. Many locations in the project area have site characteristics that favor beech and maple, The regenerate oaks or hickories would not be attempted at those sites.</p> <p>Stand data in the proposed silvicultural treatment area shows no stands in the 0 to 9 year age class, therefore the desired amount of early-successional forest habitat described in the Forest Plan (4-12%) is not being met by natural disturbances.</p> <p>Impacts of climate change are included in the draft EA.</p>
79-1.12	Tim Maloney HEC 12-26-18	The project scoping letter states the project will help fulfill the Forest Plan goal of maintaining and restoring sustainable ecosystems. This outcome is described mainly in the context of providing a diversity of age class and forest structure. Wildlife diversity is discussed	Effects to Threatened and Endangered Species as well as Regional Forester's sensitive species were analyzed in a biological evaluations and summarized in the draft EA.

		<p>mostly from the standpoint of creating more young forest habitat by harvesting and other treatments. There is no information provided about the full range of plants and animals inhabiting the project area, their habitat needs, and what endangered, threatened or sensitive species are present in the area (other than the 2 early successional bird species mentioned). More baseline biological surveys are needed to determine what impacts the proposed management activities would have on all the project area's plant and animal life.</p>	
79-1.13	<p>Tim Maloney HEC 12-26-18</p>	<p>The project scoping letter proposes widespread, landscape-level use of prescribed fire across the project area, including non-HNF land where owners consent. This project element goes well beyond other prescribed burning projects in this area and requires detailed justification. The prescribed fire prescription is described as mainly silvicultural. Yet, the HNF's latest Biennial Monitoring & Evaluation Report for FY2016 and FY2017 indicates that "Data on silvicultural burns are just now being collected as those projects are now coming to fruition." So there seems to be little data to support burning on this scale.</p> <p>Prescribed burning at this scale in the project area should only be considered after the results of prior burning in the project area have been disclosed and analyzed. For example, prescribed burning in the Fork Ridge area conducted 6 to 10 years ago— for the purpose of benefiting chestnut oak stands—should be evaluated to determine if it has accomplished its goal to regenerate chestnut oak.</p>	<p>Effects of prescribed fire are included in the draft EA.</p>
79-1.14	<p>Tim Maloney HEC 12-26-18</p>	<p>Herbicides are proposed for use on 2,154 acres for stand improvement. This activity needs to be evaluated for its potential impacts to water quality and non-target plant species.</p>	<p>Herbicide use is included in the draft EA.</p>
79-1.15	<p>Tim Maloney HEC 12-26-18</p>	<p>NEPA requires the Forest Service to analyze a meaningful range of alternatives to its proposed action. Besides the proposed action consisting of a variety of vegetation management activities, following are</p>	<p>Forest Service NEPA regulations (36 C.F.R. 220.7 (b)) state: "The Environmental Assessment (EA) shall briefly describe the proposed action and alternative(s) that meet the need for action. No specific number of alternatives is required or prescribed." Forest Service</p>

		<p>additional alternatives which should be evaluated and compared to the proposed action:</p> <p>a) Lake Monroe Watershed Health Protection and Enhancement</p> <p>This alternative would focus on actions to protect and enhance the health of Lake Monroe and its tributaries. Management actions may include:</p> <ul style="list-style-type: none"> • Road decommissioning • Restoration of eroded or degraded sites on HNF land • Acquisition of additional HNF acreage in the watershed, and restoration of degraded lands that may be acquired • Collaboration with neighboring landowners (private and public) on land and water restoration projects including stream and wetland restoration projects • Collaboration with IDNR, US FWS and US COE to restore and improve aquatic habitats in the Lake and its tributaries <p>b) HNF Forest Recreation Alternative</p> <p>Recognizing that Lake Monroe and the surrounding public lands (HNF, IDNR, COE) represent a major concentration of outdoor recreation lands and water, focus management actions on providing and enhancing sustainable outdoor recreation opportunities: trails, backcountry campsites, fishing and hunting access points, canoeing and kayaking access.</p> <ul style="list-style-type: none"> • Restore and improve existing recreation facilities and decommission sites or trails that cannot be adequately maintained because of poor design or location. • Ensure that recreation facilities are safe for users. • Limit vegetation management to that necessary to provide user safety and eliminate 	<p>Handbook (FSH) 1909.15, Chapter 10, Section 14 provides additional guidance for developing alternatives, and stresses that “Reasonable alternatives to the proposed action should fulfill the purpose and need and address unresolved conflicts related to the proposed action.”</p> <p>“When there are no unresolved conflicts concerning alternative uses of available resources (NEPA, section 102(2)(E)), the EA need only analyze the proposed action and proceed without consideration of additional alternatives” (CFR 220.7(b)(2)(i)).</p> <p>Public comments did not drive an additional alternative.</p>
--	--	--	---

		<p>invasive species.</p> <p>c) Vegetation management in Management Area 2.8 outside the Lake Monroe Watershed Identify and evaluate other areas of MA 2.8 where vegetation management may be used to provide a mix of age classes and forest structure.</p> <p>d) One or more alternatives that contain different levels and mixes of the management practices provided for in the proposed Houston South project.</p>	
79-1.16	Tim Maloney HEC 12-26-18	We should note that the timing of the comment period was less than ideal and may have prevented interested citizens from commenting by the deadline. We are sure this was not intended to limit comments, but for those who have experienced situations where decisions or comment periods were announced during holidays with that purpose in mind, this inconvenient timing serves to reduce public confidence in the process.	See Response #10
80-1	Rae Schnapp IFA 12-26-18	We would begin by requesting that the comment period for this scoping be extended for at least 30. Your November 26, 2018 Scoping Letter does not provide sufficient detail to serve as a basis for specific written comments. Having the comment deadline the day after Christmas virtually assures that many members of the public will be focused on other activities. Extending the comment period would ensure that provide more time for the public to become informed and	See Response #10
80-1.2	Rae Schnapp IFA 12-26-18	Water Quality in Lake Monroe watershed is threatened by the proposed project. Water quality in the Lake Monroe watershed is an important concern. HNF management goals include “maintain and restore watershed health”. Lake Monroe is already experiencing challenges in terms of sediment and nutrient load, and algal growth. Please explain how the proposed Houston South project would maintain or restore watershed health for both drinking water and recreational use.	Effects to soil and water in the project area and the South Fork Salt Creek Watershed are included in the draft EA.

80-1.3	Rae Schnapp IFA 12-26-18	Indiana Department of Environmental Management (IDEM) has issued Recreational Advisories for Lake Monroe in each of the past three years. Forests are the best possible cover type to protect water quality. If a water body is already impaired, the Clean Water Act prohibits further degradation.	See 80-1.2
80-1.4	Rae Schnapp IFA 12-26-18	While Best Management Practices can mitigate, they cannot be expected to completely prevent, water quality impacts. The 2006 plan did not take these factors into account, and today the community has grown, relying even more on Lake Monroe's water supply.	No impact to drinking water is expected. Effects to soil and water are included in the draft EA.
80-1.5	Rae Schnapp IFA 12-26-18	What is the Hoosier National Forest's record for tracking the implementation and effectiveness of BMPs. Is there evidence to show that implementation of BMPs in the Hoosier National Forest can be expected to completely prevent water quality impacts? Are there studies that have monitored the implementation of BMPs and their effectiveness? Does the HNF have the manpower to conduct such studies? Are there plans to monitor runoff immediately after management practices?	Forest Plan standards and guidelines along with Indiana Best Management Practices would be employed to achieve soil and water conservation objectives. When Forest Plan standards exceed Indiana BMPs for water quality standards, Forest Plan standards take precedence. BMPs and project design criteria will be monitored during implementation and any needed corrective actions would be taken immediately.
80-1.6	Rae Schnapp IFA 12-26-18	What steps will be taken to protect the hiking trails in the Hoosier National Forest, especially the Knobstone Trail? These trails are an important part of Indiana's heritage and they should be protected with a permanent visual corridor.	Recreation and visual quality are included in the draft EA.
80-1.7	Rae Schnapp IFA 12-26-18	What steps will be taken to ensure that logging equipment does not introduce invasive species into the area? What information is available about the number of people using these trails today and likely to be impacted by the proposed logging activity? What steps have been taken to inform affected parties?	The potential spread of nonnative invasive plant species is included in the draft EA. Effects to recreation are included in the draft EA A scoping letter was mailed to more than 200 people and over 80 emails were sent. The scoping letter was posted on our website and social media. Press releases were also sent to multiple newspapers.
80-1.8	Rae Schnapp IFA 12-26-18	How will the Hoosier National Forest take into account the things that have changed since the 2006 plan? Since that time, the population has grown, increasing the number of people dependent on Lake Monroe for	Demand for drinking water from Lake Monroe and recreation use on Lake Monroe is beyond the scope of this analysis. See response 60-2.7.

		their water supply. Recreational use is also increasing, but Lake Monroe is now recognized as having algae problems that interfere with recreational use.	
80-1.9	Rae Schnapp IFA 12-26-18	Part of the justification for this proposed management is to encourage the growth of oak hickory forest types. We would like to see a more thorough exploration of the premise that management is effective or needed to restore oak hickory forests. A recent study by Purdue University indicates that climate change is likely to create conditions that are dryer and more favorable for oak hickory forests, suggesting that these forest types might be favored by climatic conditions and little or no forest management would be necessary to promote oak hickory regeneration.	<p>“A shift in forest composition from oak-hickory to forests dominated by maple and beech species has implications for many wildlife and insect species (Adams and Rieske 2001, Abrams 2003). This shift could result in a reduction of species richness and abundance within forest bird communities (Rodewald and Abrams 2002) and may negatively influence certain species (USDA FS 2006b, p.3-81).</p> <p>Wetter-loving species such as sugar maple, beech, and ash are predicted to be losers under predicted changing climate. As maturing oaks and hickories age and die, they are being replaced by trees such as maple and beech. This will lead to a beech-maple forest, the predicted losers, with no oak/hickory to regenerate.</p>
80-1.10	Rae Schnapp IFA 12-26-18	Has a complete taxonomic inventory been conducted on eh Houston South area? Please explain how the proposed project will protect and rare, threatened, endangered species or species of special concern in the Houston South area! The Indiana Forest Alliance has conducted taxonomic surveys in the Morgan-Monroe and Yellowwood State Forests, which are very near to the Houston South proposed management area and in the same Brown County Hills region. Our studies indicate incredible biodiversity in these midwestern hardwood forests, including at least 24 Rare, Threatened, and Endangered species.	Effects to Threatened and Endangered Species as well as Regional Forester’s sensitive species were analyzed in biological evaluation and summarized in the draft EA.
80-1.11	Rae Schnapp IFA 12-26-18	<p>This work documented the presence of reproducing colonies of Northern Long-Eared bat, Indiana bat and Eastern Pipistrelle. How will these species be protected?</p> <ul style="list-style-type: none"> • Eastern Red bats • Big Brown Bat • Eastern Red bats • Indiana Bat - State Endangered (maternity colony) 	See Response 80-1.10.

		<ul style="list-style-type: none"> Northern Long-eared Bat - State Endangered (lactating female) Eastern Pipistrelle (juvenile male) Little Brown Bat (acoustic) State Endangered Hoary Bat (acoustic) Evening Bat (acoustic) State Endangered 	
80-1.12	Rae Schnapp IFA 12-26-18	<p>Other mammals that are rare or threatened include some shrew species. These species thrive on woody debris that is largely disturbed or removed during logging. How will these species be protected?</p> <ul style="list-style-type: none"> Pygmy Shrew (species of special concern) Smoky Shrew (species of special concern) Southeastern Shrew Short Tailed Shrew Woodland Vole White-footed Mouse 	See Response 80-1.10.
80-1.13	Rae Schnapp IFA 12-26-18	<p>Thirty-five Species of Amphibians and Reptiles included 5 State-listed species:</p> <ul style="list-style-type: none"> Banchar's Cricket Frog Northern Leopard Frog Rough Green Snake (species of special concern) Eastern Box Turtle (special protected species) Timber Rattlesnake (state endangered) 	See Response 80-1.10.
80-1.14	Rae Schnapp IFA 12-26-18	<p>Salamanders</p> <ul style="list-style-type: none"> Marbled Salamander Red-backed Salamanders Northern Zigzag Salamander Longtail Salamander Marbled Salamander Northern Slimy Salamander Southern Two-lined Salamanders Jefferson's Salamander Smallmouth Salamander Eastern Newt Rusty Salamander 	See Response 80-1.10.
80-1.15	Rae Schnapp IFA	<p>79 Bird Species including the</p> <ul style="list-style-type: none"> State Endangered <ul style="list-style-type: none"> Cerulean Warbler (<i>Dendroica cerulea</i>) 	See Response 80-1.10.

	12-26-18	<ul style="list-style-type: none"> Species of Special Concern <ul style="list-style-type: none"> Worm Eating Warbler (<i>Helminthos vermivorum</i>) Hooded Warbler (<i>Setophaga citrina</i>) Black and White warbler (<i>Mniotilta varia</i>) Whip-poor-will (<i>Antrostomus vociferous</i>) 	
80-1.16	Rae Schnapp IFA 12-26-18	<p>Further, nesting success was documented for:</p> <ul style="list-style-type: none"> Cerulean Warbler Worm Eating Warbler Hooded Warbler Louisiana waterthrush Blue gray gnat catcher Ovenbird Wood thrush Acadian flycatcher Scarlet tanager Blue winged warbler Yellowthroat 	See Response 80-1.10.
80-1.17	Rae Schnapp IFA 12-26-18	Clearly these hardwood forests are important for many species, including some that of special concern. How will these species be protected if the proposed Houston South project is carried out?	See Response 80-1.10 and 4-3.5
81-1	Judy Allensworth 12-26-18	Please extend the comment period and add open meetings to discuss Houston South management plans.	See Response #10
81-1.2	Judy Allensworth 12-26-18	I am particularly concerned about the threat to our drinking water quality and algae bloom increases. We need to plan for our great-grandchildren, not just the commercial interests of the moment.	<p>No impact to drinking water is expected. Effects to soil and water are included in the draft EA.</p> <p>Regarding algae bloom increases, see Response 60-2.7.</p>
82-1	Terry Norman 12-29-18	I am writing to you concerning the Houston South Vegetation Management and Restoration project. I did not initially receive a copy of the November 26, 2018 letter concerning the proposed work, but received a copy from my father, Marshall Norman, a couple of weeks ago. I have read it and studied the map attached to the letter and have some questions/concerns. First of all, the timing of sending this letter could have been better. Sending such a letter during the holiday period	See Response #10

		<p>of Thanksgiving through New Year's is probably the worst time of the year for sending such a notification. This is the busiest time of the year for people for many reasons and requiring a short turnaround time for input on such an important matter is less than ideal.</p>	
82-1.2	<p>Terry Norman 12-29-18</p>	<p>The map sent with the letter was very small and difficult to read. Some of the colors are hard to distinguish, especially those used for FS roads. I therefore found the map online and started to compare the map to a satellite image of the area. The very southwest corner of the map which includes County Road 1250 West off State Highway 58 is very confusing. The map shows an existing FS road between Highway 58 and the Hoosier Horse Camp but at a location that does not make sense to me. There is a road locally known as Polk Patch Road across from the Hoosier Horse Camp, but the placement of the existing FS road on the map is not across from the horse camp. The road is shown southeast of that area but does not match up with any existing road to my knowledge. Since my father, my brother, and I all own property in this area, it is important that we understand exactly where this road is located because it is slated for reconstruction and extension for what appears to be several miles. As placed on the map, it appears the road is to cross private land and I would like to understand how that will be done and what access to the road will be allowed by the private land owners, the forestry service, and the public after the construction is completed. So, to be clear, I would like to understand exactly where this road is located and what the access rules are after its reconstruction/construction.</p>	<p>The road coming off of 1250 West is shown on the Jackson County GIS as road 625 North.</p> <p>The status of County Road 625 North was confirmed with Jackson County Highway Department as a county road. It is not maintained by the County and does not show up on aerial imagery. The scoping map incorrectly labeled it as an existing Forest Service Road.</p> <p>The approximate 0.25 mile of County Road would be reconstructed and would be accessible as any other county road. Once the road crosses National Forest boundary, a gate would likely be installed with access to Forest by foot.</p>
82-1.3	<p>Terry Norman 12-29-18</p>	<p>Secondly, I have great concerns about any controlled burn next to my property. I would not plan on entering any agreement to be part of this project, but want to be sure the land that has been in my family name since the 1800's is fully protected from damage. I happen to like the mature forest area as it is and it would not be replaceable in my lifetime if it burned. Natural activities have occurred on this property over the last 10 - 15</p>	<p>U.S. Forest Service fire managers work closely with the National Weather Service to determine the best days to burn to achieve the goals and to maximize safety. Many specific conditions must be met for a burn to occur, including fuel moisture, wind speed and direction, relative humidity, etc.</p>

		years (mostly due to high winds) to open up the canopy in various areas and there is a wide variety of habitat in this area already that I prefer not be disturbed. It may become an area where I live upon my retirement so it is important to me that it is left as is.	
82-1.4	Terry Norman 12-29-18	In general, I understand what the project is trying to do. I do innately struggle with areas of clearcut, herbicide, and burn, however. The forest is in its present condition because of the way it has been managed over the last 50 years. I would like to think we are getting better at such management, but there area some indications we are not. About 35 or 40 years ago, several areas of the forest were clearcut. I was a hunter back then and it certainly made the hunting life difficult as one tried to navigate from a mature/open area to one that had been clearcut. What I saw after this clearcut is the situation we have today which the "Forest Plan" finds unacceptable. The biggest change that occurred was the rapid increase in the deer population. These deer now cause disease concerns and over population which has led to countless auto accidents, overrun of human populated areas, and a source of property owner disagreements. I really don't mind harvesting mature trees that otherwise might become diseased and weakened over time. That just seems to be a smart thing to do. But clearcutting areas, cutting out trees so others can dominate, applying herbicide to over 2,000 acres, and burning at least 10,000 acres seems to be too heavy handed as opposed to letting Mother Nature do her thing.	Comment noted. You will receive the draft EA and a 30-day notice and comment period will follow.
83-1	Cynthia Leistikow 12-30-18	I request that you reconsider the decision regarding the proposed Houston South Project. To timber 4000 acres on the watershed of Lake Monroe, propose the burning of 10,000 acres and treat the land with herbicides will most certainly affect the habitat of the endangered brown bat, affect 24 miles of hiking trails and result in the pollution of our water source with sediment and herbicides.	Effects to threatened and endangered species, recreation, prescribed fire, soil and water, and herbicides are included in the draft EA.
83-1.2	Cynthia Leistikow	This is unacceptable! I cannot believe that the water source and natural habitat that so many are dependent	Comment noted.

	12-30-18	on are subject to this decision. This is deplorable and needs to be turned around!	
84	Matt Mulligan 1-2-19	I would like to express my displeasure with the proposed Houston South Project. There are many environmental reasons why this project should not go forward. Economically, it doesn't make sense to sell timber at below-market rates.	Comment noted. Timber harvest is a tool to accomplish the proposed action, not the reason for the project.
85	Chris Lubinski 2-18-19	I strongly oppose any plans for clear-cutting or use of herbicides anywhere within the Lake Monroe watershed. The lake is already silty and fragile enough considering the multiple threats it currently faces. Clear-cutting and herbicides would unnecessarily put the lake in even greater peril when other alternatives are available.	The four watersheds that ultimately drain into the Lake Monroe Reservoir include the South Fork Salt Creek, Middle Fork Salt Creek, North Fork Salt Creek, and Lake Monroe-Salt Creek watersheds. The proposed Houston South project occurs in the South Fork Salt Creek watershed. Effects to soil, water, and herbicide use are included in the draft EA.
86-1	Nile Arena 2-18-19	I am deeply troubled by the reports of the logging plan in Hoosier National Forest. What disturbs me most is the risk that the Monroe County Environmental Commission has found to potentially impact the drinking water of my town. I live in Bloomington, and any logging project that risks the health and quality of my water is not worth it. I would urge you strongly to reconsider this logging project, because of the great risks involved to the communities nearby. If you are not familiar with what a small city's water crisis looks like, you will not have to look very far back into history. Flint, MI is a ghastly example of what happens when public health is ignored for quick profits. I would encourage prudence, not greed and decency, rather than hasty planning.	No impact to drinking water is expected. You will receive the draft EA and a 30-day notice and comment period will follow.
86-1.2	Nile Arena 2-18-19	What's more, I am rather ideologically opposed to logging the Hoosier National Forest. The claims that this is for the health of the forest is, to me, highly specious science. Where is the precedent for such a risky project? If it lies anywhere, I suspect it lies in Flint. Do what's right for me and the Hoosiers in my community and abandon this logging project until it can be done without risking that most precious natural	The Forest Service is a federal agency under the United States Department of Agriculture. Legal mandates such as the Multiple Use Sustained Yield Act of 1960 and National Forest Management Act of 1976 direct the Forest Service on how timber harvest is conducted. A complete NEPA analysis will occur and effects disclosed in an Environmental Assessment.

		resource- our air and drinking water (if ever such a time will come).	
87-1	William Smith 2-24-19	I am concerned about proposed clear-cutting and herbicide use in a recent HT article. I am concerned about negative impacts these practices could have on Lake Monroe, which supplies my drinking water.	No impact to Lake Monroe is expected. Effects to soil, water, and use of herbicides are included in the draft EA.
87-1.2	William Smith 2-24-19	Please pursue the least aggressive practices that will accomplish the goals of this project and please do not use herbicides at all. Human, animal, and plant life should not be exposed to these chemicals if at all possible.	The use of herbicides is included in the draft EA.
88-1	David Warren, MCEC 3-01-19	We are concerned you may arrive at an incomplete set of alternatives in the final proposed document issued later this year.	See Response 79-1.15
88-1.2	David Warren, MCEC 3-01-19	Both the lower and upper portions of Lake Monroe are already on the EPA 303.d list of impaired waters due to algae, taste, and odor. ¹ These issues—particularly algae—continue to be of concern to the Army Corp of Engineers and the Indiana Department of Environmental Management. Given ongoing algae problems in Lake Monroe, we look to Hoosier National Forest to show leadership in the effort to reduce contributions to nutrient and sediment loading.	According to the U.S. Army Corps of Engineers LRL Water Quality Program Management Plan, “General contributing factors that promote the formation of HABs (Harmful Algae Blooms) are: ample sunlight, warm temperatures, low-water or low-flow conditions, and excessive nutrients (nitrogen and phosphorus).” “Most nitrogen and phosphorus pollution (i.e., eutrophication) comes from the runoff of agricultural fertilizer, lawn fertilizer, untreated human sewage (storm overflows) and untreated animal sewage from concentrated animal feeding operations.” Effects to soil and water are included in the draft EA.
88-1.3	David Warren, MCEC 3-01-19	Along with 4,000 acres of timber cutting, you are proposing 15 miles of new roads, most of which will disrupt soils on steep ridges. What models are you using to evaluate the amount of sediment and nutrients like organics and phosphorous that will be released in the watershed and ultimately into the lake? What do those models show? Do you have relevant baseline data with which to compare your results?	Effects to soil and water resulting from project activities are included in the draft EA.
88-1.4	David Warren, MCEC	Do you have the resources necessary to ensure 100% compliance with best management practices to prevent	See Response 80-1.5

	3-01-19	soil losses? What is your recent track record of compliance?	
88-1.5	David Warren, MCEC 3-01-19	Are you examining models used to estimate the near, medium, and long-term impacts of climate change on algae and other contaminants in Lake Monroe? If so, what do those models indicate?	See Response 88-1.2 Effects of climate change on algae and other contaminants in Lake Monroe are beyond the scope of this analysis.
88-1.6	David Warren, MCEC 3-01-19	Was there ever an investigation of potential alternative logging areas (area 2.8 general classification) that are not located in a watershed providing surface drinking water?	The Forest Plan EIS analyzed effects to municipal watersheds (pages 3-230 to 3-321). The four watersheds that ultimately drain into the Lake Monroe Reservoir include the South Fork Salt Creek, Middle Fork Salt Creek, North Fork Salt Creek, and Lake Monroe-Salt Creek watersheds. The proposed Houston South project occurs in the South Fork Salt Creek watershed. The Houston South project area was determined because the area is overly dense, lacking young forest, and is losing the oak-hickory component as stands age. Other locations in Management Area 2.8 may be considered in the future.
88-1.7	David Warren, MCEC 3-01-19	...we hope you acknowledge that much has changed in the 13 years since your last management plan was developed. Much more will change in the decades following this proposed project. All this creates uncertainty that we must guard against, as being in error is not an acceptable outcome...	A complete NEPA analysis is in progress. Environmental effects are disclosed in the draft EA.
89	Patrick Dunigan 3-13-19	I am voting for no (none) logging of the forest. We should basically leave the natural environment alone. And allow the ecological system to evolve naturally. Yes, this will takes a long time. Humans have destroyed the vast woodlands across the globe. We need to preserve the remaining natural landscape. Also, we need to expand wild areas: Forrest (sic), watersheds and wetlands.	Comment noted.
90	Thomas Hodnett 7-07-19	I support this project.	Thank you.

References

- Abrams, M.D. 2006. Ecological and ecophysiological attributes and responses to fire in eastern oak forests. Pages 74-89. In: Fire in eastern oak forest: delivering science to land managers. Dickinson, M.B. ed. USDA Forest Service, Northern Research Station, GTR-NRS-P-1.
- Bunch, A. R. 2016. Loads of nitrate, phosphorus, and total suspended solids from Indiana watersheds. Pages 137-150. In: Proceedings of Indiana academy of science 125 (2), 2016.
- Brose, P.H., D.C. Dey, T.A. Waldrop. 2014. The fire-oak literature of eastern North America: synthesis and guidelines. USDA Forest Service, Northern Research Station, GTR-NRS-135.
- Crocker, S.J., B.J. Butler, C.M. Kurtz, W.H. McWilliams, P.D. Miles, R.S. Morin, M.D. Nelson, R.I. Riemann, J.E. Smith, J.A. Westfall, and C.W. Woodall. 2017. Illinois forests 2015. Resource Bulletin NRS-113. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 82 p
- Frost, Cecil C. 1998. Presettlement fire frequency regimes of the United States: a first approximation. Pages 70-81. In: Fire in ecosystem management: shifting the paradigm from suppression to prescription. Pruden T.L. and Brennan L.A. eds. Tall Timbers Fire Ecology Conference Proceedings, No. 20. Tall Timbers Research Station, Tallahassee, FL.
- FS Agreement # 08-MU-1113-2400-264. Memorandum of Understanding between the U.S. Department of Agriculture Forest Service and the U.S. Fish and Wildlife Service to promote the conservation of migratory birds. 2008. 13 p.
- Guyette, R.P., M.C. Stambaugh, D.C. Dey, and R. Muzika. 2012. Predicting fire frequency with chemistry and climate. *Ecosystems*: 15: 322-335.
- Guyette, R.P., D.C. Dey and M.C. Stambaugh. 2003. Fire and human history of a barren-forest mosaic in southern Indiana. *The American Midland Naturalist*: 149:21-34.
- Jones, W.W., M. Jenson, E. Jourdain, S. Mitchell-Bruker, L. Strong, L. Bieberich, J. Helmuth, T. Kroeker, 1997. Lake Monroe diagnostic and feasibility study. School of Public and Environmental Affairs, Indiana University. 324 p.
- King, D.I., Schlossberg, Scott. 2013. Synthesis of the conservation value of the early-successional stage in forests of eastern North America. *Forest Ecology and Management* 324. 186–195
- Parker, George, R.; Ruffner, Charles M. 2004. Current and historical forest conditions and disturbance regimes in the Hoosier-Shawnee ecological assessment area. In: Thompson, Frank R. II, ed. The Hoosier-Shawnee ecological assessment. General Technical Report NC-244. St. Paul: MN: U.S. Department of Agriculture, Forest Service North Central Research Station. 267 p.
- Roberts, Patrick H; King, David I. 2017. Area requirements and landscape-level factors influencing shrubland birds. *The Journal of Wildlife Management* 81(7):1298–1307
- U.S. Army Corps of Engineers, Louisville District. 2018. Louisville District Water Quality Program Management Plan. 35 p.

US Army Corps of Engineers, Louisville District. 2016. Monroe Lake Master Plan. 110 p.

U.S. Department of Agriculture, Forest Service. 2012. Forest Service Handbook 1909.15. National Environmental Policy Act Handbook, Chapter 10, Environmental Analysis. WO Amendment 1909.15-2012-3. 47 p.

U.S. Department of Agriculture, Forest Service (USDA FS). 2006a. Land and resource management plan - Hoosier National Forest. Eastern Region. Bedford, IN: Hoosier National Forest. 85 p. + appendices.

U.S. Department of Agriculture, Forest Service (USDA FS). 2006b. Final environmental impact statement – land and resource management plan. Bedford, IN: Hoosier National Forest. 381 p + separate volume of appendices.

U.S. Department of the Interior, U. S. Geologic Survey. Federal Standards and Procedures for the National Watershed Boundary Dataset (WBD). <https://pubs.usgs.gov/tm/11/a3/pdf/tm11-a3.pdf>